

Conceptualizing of value offerings from a customer perspective

Understanding the elements of value and their relationship with customer satisfaction

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Abstract

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Keywords: Value offering, Customer value, Performance value, Pricing value, Relationship building value, Co-creation of value, Customer satisfaction.

The initial idea for this research is based on the gap that I found in my company performance and specifically in the process of value offering and the relationship with customers. The company has recently faced the challenges of a loss of market share and competitive advantage. The aim of this study is to provide a validated value offering constructs for the company. That is, knowing the customers' needs, value and preferences better; identifying what kind of value the customers are looking for and improving the value offerings of the company in order to raise customers' satisfaction. Understanding the priority of value offering elements from customers' perspective, the nature of customer satisfaction and the relationship between the elements of value offering and customers' satisfaction are the main objectives. The relevant literature and research related to value offering including its elements, value, perceived value and customer satisfaction are reviewed comprehensively. The methodology used is a case study. Both quantitative and qualitative methods are used for collecting and analysing the data. In qualitative phase, 16 customers were selected for in-depth interviews and for quantitative phase 268 customers who all are dentists responded a survey made up of 24 scales. The result showed that the highest significant element is Price value and also it was revealed in which important parts related to value offering and customer satisfaction the company is performing poorly.

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Table of Contents

Abstract.....	i
Acknowledgements.....	ii
Table of Contents.....	iii
List of figures.....	vii
List of Tables.....	viii
 Chapter 1 Introduction.....	 1
1.1 Introduction.....	1
1.2 Problem statement.....	1
1.3 Who I am as a manager.....	3
1.4 History of the organization.....	4
1.5 Dental implants.....	4
1.6 Aims and objectives of the study	5
1.7 Research questions	6
1.8 The significance of the study	6
1.9 The structure of the thesis	7
 Chapter 2 Literature review	 9
2.1 Introduction	9
2.2 Value offering	10
2.2.1 Performance value	16
2.2.2 Price value	18
2.2.3 Relationship building Value	19
2.2.4 Co-creation	20
2.3 The concept of value	21
2.3.1 Service dominant logic	22
2.3.2 The process of value co-creation	24
2.3.3 Recourse integration	26
2.3.4 B2C value	28
2.3.4.1 Purchase value & consumption value	29

2.3.4.2 Uni-dimensional & Multi-dimensional value	30
2.3.4.3 Main characteristics of B2C value	32
2.3.5 B2B Value	32
2.3.5.1 Transactional & relational approach to value.....	33
2.3.5.2 Customer & supplier and Dyadic perspective	34
2.3.5.3 Main characteristics of B2B value	35
2.4 Customer satisfaction	36
2.4.1 Disconfirmation paradigm	36
2.4.2 Perceived value and customer satisfaction	37
2.4.3 Desired value and satisfaction	39
2.4.4 Marketing mix and satisfaction	40
2.7 The gap in literature	41
2.8 Development of Hypotheses	44
2.9 Summary	46
Chapter 3 Methodology	47
3.1 Introduction	47
3.2 Paradigm	47
3.3 Mixed method and triangulation.....	50
3.4 Abductive approach	54
3.5 Methodology	55
3.6 Approach	56
3.7 Research design	57
3.8 Phase 1 Qualitative Research	60
3.8.1 Reasons for qualitative research	60
3.8.2 Approach	61
3.8.3 Data collection instrument	62
3.8.4 Sample	63
3.8.5 Implementation	64
3.8.6 Data management	66
3.8.7 Analysis procedures	67
3.9 Phase 2 Quantitative research	69
3.9.1 Approach	69

3.9.2 Data collection instrument	70
3.9.3 Pre-testing	75
3.9.4 Sample	75
3.9.5 Implementation	76
3.9.6 Data management	76
3.9.7 Analysis	77
3.9.7.1 Analysis procedures	77
3.10 Ethical approval procedure	81
3.11 Summary	83
 Chapter 4 Result	 84
4.1 Introduction	84
4.2 Objective 1 & Objective 3	85
4.2.1 Descriptive statistics	85
4.2.2 Exploratory factor analysis	89
4.2.3 Assessment of validity	92
4.2.4 Structural equation modelling	93
4.2.5 Confirmatory factor analysis and measurement models.....	96
4.2.6 Assessment of model fit for the confirmatory factor analysis..	102
4.2.7 Common method bias	106
4.2.8 Test of multicollinearity	110
4.2.9 Hypothesis testing	111
4.3 Objective 2	113
4.3.1 Price value	113
4.3.1.1 Fair price	113
4.3.1.2 Consistency	114
4.3.1.3 Beneficial prices	115
4.3.1.4 Valuable prices	116
4.3.1.5 Affordable payment	117
4.3.2 Relationship building value	117
4.3.2.1 Accessibility	117
4.3.2.2 Responsiveness	118
4.3.2.3 Continues relationship	120

4.3.2.4 Long-term relationship	120
4.3.2.5 Add-on value	121
4.3.2.6 Respect	121
4.3.3 Performance value	123
4.3.3.1 Personal preferences	123
4.3.3.2 High quality	124
4.3.3.3 Customer needs	125
4.3.3.4 Exceeding customers' expectations	126
4.3.3.5 Innovative features	127
4.3.3.6 Functionality	127
4.3.4 Co-creation of value	128
4.3.4.1 Joint quality service	128
4.3.4.2 Mobilizing offerings	129
4.3.4.3 Identified needs	129
4.3.4.4 engaging customers	129
4.3.4.5 supporting system	131
4.3.4.6 Trust	131
4.3.4.7 Eagerness	132
4.3.5 The Main themes	133
4.4 Summary	135
 Chapter 5 Discussion & Conclusion	 136
5.1 Introduction	136
5.2 Discussion	136
5.2.1 Price value	137
5.2.2 Co-creation of value	143
5.2.3 Relationship building value	147
5.2.4 Performance value	149
5.3 Conclusion	153
5.4 Theoretical contribution	154
5.5 Managerial contribution	155
5.5.1 Practical implications for MTA	156

5.6 Limitation of the research and further research	159
References	162
Appendix - Questionnaire.....	189

List of Figures

Figure 2.1 <i>Gaining positional advantage via the firm's pre-emptive value offering strategy and realized outcomes</i>	11
Figure 2.2 <i>Conceptual Model</i>	43
Figure 3.1 <i>Mixed Method procedure</i>	54
Figure 3.2 <i>Research design</i>	59
Figure 4.1 Path diagram showing initial hypothesized first-order confirmatory factor analysis model with standardized coefficients.....	100
Figure 4.2 Initial structure model.....	101
Figure 4.3 final confirmatory factor analysis model	105
Figure 4.4 <i>Common method bias</i>	108
Figure 4.5 <i>full structural model</i>	109
Figure 4.6 Best-fit model of study	112

List of Tables

Table 3.1 <i>Modification of value offerings' indicators</i>	71
Table 3.2 <i>Modification of customer satisfaction indicators</i>	74
Table 4.1 <i>Value offering constructs</i>	85
Table 4.2 <i>Price value</i>	86
Table 4.3 <i>Relationship building value</i>	87
Table 4.4 <i>Performance value</i>	87
Table 4.5 <i>Co-creation of value</i>	88
Table 4.6 <i>Value offering constructs</i>	91
Table 4.7: <i>Average Variance Extracted (AVE)</i>	92
Table 4.8: <i>Inter-construct correlations</i> ,.....	93
Table 4.9: <i>Regression weights</i>	96
Table 4.10: <i>Squared Multiple Correlations</i>	98
Table 4.11 <i>goodness of fit statistics for the initial CFA</i>	103
Table 4.12 <i>How the final CFA model is achieved</i>	104
Table 4.13 <i>Hypothesis testing</i>	112
Table 4.14 <i>Transcription of interviews</i>	134

Chapter 1 - Introduction

1-1. Introduction

The initial idea for this research is based on the gap that I found in my company performance and specifically in the process of value offering and the relationship with customers. Mehr Teb Asia is an import company that is active in the dental materials industry—primarily in dental implants—and that has been importing its implants from Spain into the Iranian market for over ten years. I opened this company many years before I found that the Iranian market was lacking a high-quality dental implant. At that time, I wished to provide a better dentistry service and products to Iranian patients. Now, while I have succeeded in filling this gap, I have found a problem in the company. I started this research to solve that problem.

This chapter covers the problem statement, a brief explanation of my background, the history of the organization, the aims and objective of the study, and the research questions. At the end of the chapter, an overview of thesis structure is provided and the significance of the study is discussed.

1-2. Problem statement

In terms of my business, for the first years the company performed very well. It gained a good market share and attracted many customers. However, the situation has started to change for the company and in fact the company has recently faced the challenges of a loss of market share and competitive advantage. In the past, the competition was not as strong: ten years ago, Mehr Teb Asia competed with only five other companies, but now, it has around 50 competitors. In such a competitive market, MTA must fight to maintain its position and customers and to regain its competitive advantage in order to become the key distributor once again. The competitive situation has changed, and a strategic response based on value and informed by customer response is necessary.

In 2005, the company had around 200 dentists as customers and at that time the number of total available implantologists (dentists specializing in dental implant) in a market was around 4000 dentists. This means the company had 5 % of total market share. Back then, Iran dental implant market used to be a kind of monopoly and just five other companies were distributing dental implants in the market, and in this environment Mehr Teb Asia company, as a new company, performed very well and survived in a monopoly market and had 5 % of total market share.

In 2008, the company had acquired 600 dentists as customers and the total number of implantologists was 6000 dentists and it means the company had 10% of market share. The market was about to switch from monopoly to competitive situation and was passing the transition stage. Fifteen companies in total were by then active in this sector in Iran.

By 2014, the total number of available implantologists had risen further to 14000 and the number of total active supplier companies to 50, making the sector very competitive. Unfortunately, company's customers went down to 500 in a situation that the number of total implantologists raised dramatically to 14000 that this number is not comparable with 6000 in 2008, losing market share. In 2014 the company has just 3% of market share and the company has been losing about 2% market share annually since 2008. The company used to be one of the top five companies in the market in terms of market share back in 2008.

In the beginning of business in 2005, the company managed to acquire a reasonable market share in a market which was monopolized by big companies but when the market changed to a competitive one, the company lost market share and customers dramatically and, customer satisfaction was declining, customers were lost and new ones were not attracted to the company. The company needed to understand their customers better, to know more about customers' preferences in this competitive market and try to make an appropriate value proposition in order to attract and keep customers satisfied. Knowing the nature of customer satisfaction can make the company able to prepare their value offerings' elements based on the customers' preferences. If the company was losing their customers in this competitive market, it meant the other companies had a better value

proposition for the customers and Mehr Teb Asia company does not know what exactly makes the customers satisfied.

Similar to how I started this business with filling a gap in the Iranian market, I now start this research by filling a gap. This time the gap exists specifically in the value offering procedure of the company. I realized that when I am losing my customers or unable to keep them satisfied, it means they do not perceive the expected value from the products and services offered by MTA. I realized that I have to understand the value of customers better in order to provide them with value offering of the company that leads to their satisfaction.

By understanding the relationship between value offerings elements and customer satisfaction and also identifying the priority of value offerings elements from customers' perspective, MTA would be able to propose the best value offer to the customers based on their preferences and keep them satisfied and loyal to the company. That is the only way for MTA to survive in this competitive market and get back on track to regain its market share and competitive advantage. These reasons motivated me to do a comprehensive research within Mehr Teb Asia Company on the value offering from customers' perspective.

1-3. Who I am as a manager

I am from Iran and I have been running my own business since 2004. I import dental implants and other dentistry equipment from Spain to Iran and Armenia markets. I currently lead two offices in Iran and Armenia and my company now has 25 employees and it is getting bigger year by year. In fact, I am considering expanding my business onto new fields and opening more offices in other countries such as the UK and USA, in the near future. I try to keep myself up-to-date about the changes in management and business by attending different professional workshops run by famous organizations such as the United Nations. Regarding my academic background, I have a bachelor degree in accounting and I graduated from the University of Tehran with a master degree in MBA in 2010. In addition to that, I am a member of the British Academy of Management.

1-4. History of the organization

Back in 2004, Mehr Teb Asia Company initiated its activity in Iran with the aim of distributing quality dental implants and related accessories for expanding this new treatment in the dentistry field. At that time, using dental implant was something new and most patients in Iran had to use other treatments which were complicated and time-consuming and which did not have the efficiency and effectiveness of dental implants.

In many cases these methods were not very useful for the patients and even brought them many problems. Seeing these issues in Iran and simultaneously observing the progress that other countries were making in terms of methods for replacing fail teeth, gave rise to the idea of opening Mehr Teb Asia company to import quality dental implants from developed countries to Iran and neighboring countries. MTA chose to offer Ilerimplant Group products to Iranian dentists, for these one of the best dental implants in Spain. MTA became the exclusive distributor of Ilerimplant for Iran and Armenia. Now the company is actively distributing dental implants throughout the market.

1-5. Dental implants

Implants are considered as a replacement for natural teeth. They are a safe treatment and they can last forever. The implant is made from titanium, which is a material that has been shown over many years to be well tolerated by bone. Dental implant is essentially a substitute for a natural root and it is screw or cylinder shaped. It fits directly into patients' jawbone and holds false teeth in place in the same way that roots support natural teeth. Once the implant is fitted in the bone, it provides the foundation for long-term support of crowns, bridges or dentures. The treatment time is between six weeks to six months and depends on the current condition of the patients' bones.

1-6. Aims and objectives of the study

This doctoral research aims to examine the factors and determinants affecting customer satisfaction with particular emphasis on how value offerings' elements of Mehr Teb Asia company can influence the satisfaction of dental implant buyers. This study aims to provide a validated value offering constructs for MTA Company. That is, knowing the customers' needs, value and preferences better; identifying what kind of value the customers are looking for and improving the value offerings of the company in order to raise customers' satisfaction. This study has the following objectives:

1. To understand the relative importance/priority of value offering elements.
2. To understand the nature of customer satisfaction.
3. To identify relationship between the elements of a value offering and customer satisfaction. Specifically, to understand:

3.1 The relationship between performance value and customer satisfaction.

3.2 The relationship between pricing value and customer satisfaction.

3.3 The relationship between relationship building value and customer satisfaction.

3.4 The relationship between co-creation value and customer satisfaction.

In the first objective, the priority of value offering elements from customers' point of view is revealed and it is going to be found which element of value offering is the most / least important and which elements can lead to more satisfaction among the customers. In the second objective, the nature of customer satisfaction is going to be identified and it will be analysed what makes the customers satisfied or unsatisfied. The third objective explores in detail the relationship between the elements of value offering, which are performance value, pricing value, relationship building value and co-creation value, and will reveal to what extent each element leads to customers' satisfaction.

The research context is B2B because the customers of the company are the dentists who themselves are not the final user of implants rather they are the main decision maker for choosing the right implant for patients because

dental implants are a specialized product and the patient who is the final user of implant, does not have enough knowledge to choosing the correct implant for their treatment. So the company is selling the products to the dentists who also sell the products to the patients and in this process the customers of Mehr Teb Asia are the dentists and this matter makes the research context B2B rather than B2C and this study seeks to understand value offerings from customer's perspective into B2B context. It attempts to establish theoretical clarity about value offerings in a B2B context from a customer perspective.

1-7. Research questions

In line with the research aims and objectives, the following research questions are asked:

1-What are the most and the least important elements of a value offering?

2-How do the elements of a value offering influence customer satisfaction?

The relationship between value offering's elements and customer satisfaction is going to be investigated. It is looked at how value offerings factors including performance value, pricing value, relationship building value and co-creation value affect the happiness of customers. In addition, it is analyzed which elements of value offering are most / least important ones, from a customers' point of view.

As mentioned earlier the main problem of the company is the loss of market share and dissatisfaction amongst customers and so by answering the above research questions the company can understand the exact need of the customers and identify what is the most important factor on customer satisfaction and the relationship between elements of value offering and customer satisfaction and pay more attention to the important factors rather than any unimportant items in terms of customer satisfaction.

1-8. The significance of the study

From an academic point of view, the current study will enrich the literature body on value offering, perceived value and customer satisfaction. Taking into consideration the research objectives, this thesis is going to make major

contributions to our existing knowledge in the field. It also draws attention to customer satisfaction by the value offering elements including performance, pricing, relationship building and co-creation of value, from a customers' perspective in the dental implant sector. Besides, value offering, value and perceived value do not have such clear definitions, nor do they have a united framework in the literature.

The conceptual model of this study will therefore help researchers to better understand the fundamentals of value offerings components from a customers' perspective, as well as to conceptualize the concept of value offering precisely and to examine its impact on customer satisfaction. The research is also original and innovative as it explores and theorizes value offering in the context of the dental implant industry in Iran, while also considering all related elements to value offering of the companies.

From the practical standpoint, since it is a single case study, the research helps Mehr Teb Asia Company to take the competitive advantage back and manage to improve its performance in a competitive market. It also makes the company able to offer a better value offering package its customers and to have a better understanding of the customers. This will enable the company to raise the level of satisfaction of its company, also in comparison to the satisfaction levels of customers from competing companies.

Besides, the result of the study can help other companies working in dentistry market of Iran to offer a better service and products to their customers, and then build up customer relationship in the long-term as well as formulate a proper strategy leading to more customer satisfaction.

1-9. The structure of the thesis

This thesis is structured into five chapters. Chapter 1 provides an outlook of the entire thesis. It includes the aims and objectives of the research, and the research gap and the significance of the study are discussed. The research problem and research questions are highlighted. Also a managerial background of the researcher is mentioned and it is explained very briefly who I am as a manager. Since this study is a single case study about Mehr Teb Asia Company, a history of this organization is given at the start of this

chapter, together with a brief explanation about dental implants. This should make the readers more familiar with the main topic of this study.

Chapter 2 covers and analyses the relevant literature and research related to value offering including its elements, value, perceived value and customer satisfaction. This chapter reviews relevant conceptual and empirical studies which together make the theoretical background of the study. Various themes in the literature are reviewed individually, and the conceptual model of the study is discussed. The theoretical model tries to integrate critical issues highlighted and discussed throughout the chapter and to fill the mentioned research gap. Gaps in the research are identified and discussed and at the end of this chapter the development of hypotheses are comprehensively explained.

Chapter 3 focuses on the research design and methodology considered appropriate for this research. It sets up the necessary research basis, provides a general overview of the research methodology adopted and discusses the plan and process of data collection. The chapter starts with a discussion of the selected research paradigm. This is followed by an explanation of the research context, the approach and method used, and then the procedure of ethical approval of this study. The chapter then proceeds to describe the sample chosen and concludes by providing details of the data collection and analysis steps of different phases of this study. This chapter covers the details of both the qualitative and quantitative research processes. The sampling process, instrument development and data collection of both phases of the study are discussed.

The next 2 chapters (chapters 4 and 5) report the results of the empirical examination of the research topic. Chapter 4 provides the empirical analysis investigating the relationship between the main constructs of the study. This chapter presents the process of data analysis and the findings.

Chapter 5 includes a discussion of the research objectives in relation to the results of the study, with a specific emphasis on its implications for and contributions to the company. This is followed by consideration of the theoretical and managerial implications and contributions. The thesis concludes with limitations and potential areas for future research.

Chapter 2 - Literature review

2-1. Introduction

A comprehensive literature review locates the research in the theory domain which it utilizes and to which it contributes, setting down the foundations for the study and adding to the justification of the objectives of the study in more detail. The aim of this literature review is to bring forward usable value offerings' constructs and to form the conceptual base concerning the specific nature and circumstances of value offerings, as well as to introduce a theorized model for this study.

The history and evolution of value, perceived value and value offerings were completely reviewed in order to understand the concepts and useable constructs of value offerings from the customers' point of view. All thinking and perspectives on perceived value, and on value offerings' conceptualizations were researched in a sequenced manner to develop a standpoint about the usability of the value offerings conceptualization for this study. This study is concerned with value offerings from a customers' perspective. The value offering is usually assessed by the company managers and it is assessed inside the company. In this study, the concept will be evaluated from the outside. To this end the literature concerned with customer perceived value was investigated thoroughly.

The main focus of this literature review is therefore on customer perceived value and value offering concepts. In the following section, the concept of value offering is considered, including the elements of value offering which are performance value, pricing value, relationship building value, and co-creation of value. These four elements of value offering will be reviewed individually. In the next section, the concept of value including service dominant logic and co-creation of value and differences between B2B and B2C are explained. Then, the concept of customer satisfaction is explained. Finally, the current gap in the literature field is identified, and based on this gap, all before-mentioned concepts are brought together in a conceptual framework and the hypothesis of the research are developed which is presented at the end of this chapter.

2-2 Value offering

It is really imperative for the company to identify their customers' perception of value in the best possible way as an element of their strategic planning because this step forms the basis for delivering the best value offerings for the customers. Needless to say, the company that offers a value that is better than that of their competitors will get a positional advantage. (Jedidi & DeSarbo and Sinha, 2001).

Even though there are many different studies in different fields on the value creation process, there are very a few on the value offering. It is therefore challenging to find research that explains the process of value offering creation of companies, or the result that a company will see based on their value offerings. One of the few researchers that focuses on value offerings and its consequences are O'Cass and Ngo. Value offering is defined as the value created by the companies for the customers, and the term customer value is related to the value perceived by the customers (Ngo and O'Cass, 2009).

Customers are the final decision makers regarding what is really considered value and so the role and challenge for companies is to find, realize and interpret value; and then deliver this value to the customers who are looking forward to receiving and experiencing it. This process involves the value offerings process of the companies, and the companies can acquire a positional advantage through their value offering (O'Cass & Ngo, 2011).

They explain their theorized model as follows:

Our model theorizes that the value offering is a firm's interpretation of and responsiveness to customer requirements via the delivery of superior performance in its value offering mix of performance value, pricing value, relationship building value and co-creation value. Our study explains the nature of a firm's value offering, and examines the contribution it makes to customer centric performance outcomes, which consists of customer acquisition, customer satisfaction, customer retention and add-on selling (p. 649).

The authors employ the model of Bowman and Ambrosini (2000) extending it to make their own framework (Figure 2.1).

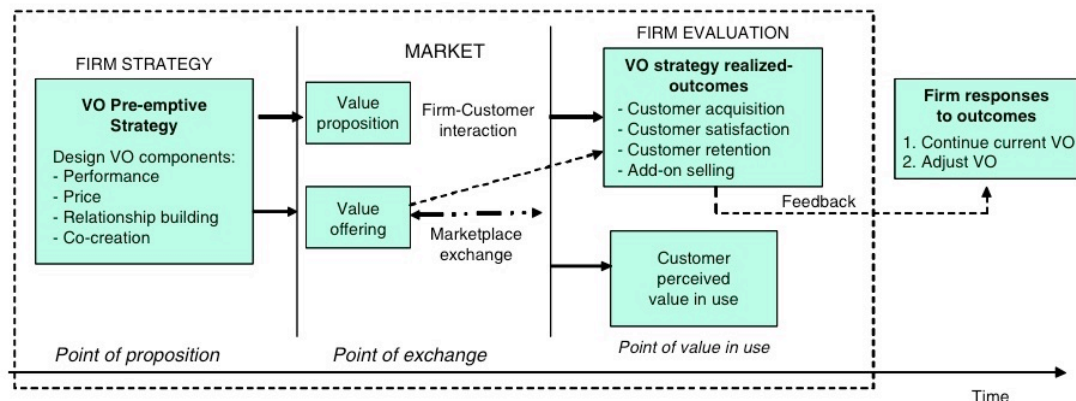


Figure 2-1. Gaining positional advantage via the firm's pre-emptive value offering (VO) strategy and realized outcomes (O'Cass & Ngo, 2011, p. 649)

These researchers found that a company can attract, keep and satisfy its customers by making a proper value offering. Value creation is carried out in three steps: 1) the company makes value at the point of proposition, which involves the value offerings of the company; 2) the customer perceives the value, which is referred to as perceived value in use by the customer, and 3) the customer understands that the value is exchanged, at the point of an exchange through firm-customer interaction.

This theoretical framework took a perspective from the firm side. This research concentrated on the activities that the company carries out to design their value offerings. One of the key decisions of managers involves the point of proposition, where they define what elements of value offering differentiate their business in the marketplace, and how they can use their value offering elements to achieve positional advantage over their competitors.

Different customers clearly look for superior value in different parts of the value offerings: some may want to see a high performance in terms of high service or perfect products, some may see the value in a reasonable price, and others may prefer to see a close relationship between the companies and its customers. Others may possibly perceive value when they are engaged in the process of value creation. This means that companies should include all these elements in their value offerings. The value offering is thus a

mix of elements such as performance value and pricing value, which can be named as *what we can do for you* as well as elements such as relationship building value and co-creation of value, that can be referred to as *what we can do with you*. The authors state the following about value offering: *A value offering reflects a firm's efforts in interpreting and responding to what value customers are looking for in a marketplace offering.* (O'Cass & Ngo, 2011). The authors carried out this research from a managers' point of view. Their samples included senior managers of Australian companies who were asked about the main strategies of value offerings that their companies used. The results showed that making a better value offering helps companies to achieve more customers-centricity performance and also to attract, satisfy and retain more customers.

Unfortunately, it is a limitation of this study that the authors used only the managers' perspective. The authors recognize this and clearly state that, as the value offering in the market is determined by customers, using the customer-perceived value would help to extend the current findings and thereby give more insight into the value creation process (O'Cass & Ngo, 2011).

Ngo and O'Cass (2009) found that companies have become aware of the significance of value offerings over the past years, and that this has made them face the challenge of what value they should create in their products. Mittal and Sheth (2001) focused on product and pricing value, and argue that customers look for products with offerings that include attribute performance such as quality, innovation, and pricing value (such as fair prices) and that they then compare them with the offerings of competitors. The tangible and physical aspects related to value offerings were highlighted in this research. The tangible part of value offering though, is not the only one, as value can be created for customers through intangible resources as well. Factors such as rapid responses from companies, easy and quick access to business, and relational activities with companies, are also important for customers. These intangible factors can therefore certainly also bring value to customers. Besides, customers like to co-construct their consumption experience, and all these factors mentioned here push companies for more interaction with their customers, which engages them in co-production activities (Ngo & O'Cass,

2009). Thus, we can define value offering to customers as:

The value that firms build in a particular product and/or service (brand) in terms of attribute performance (e.g., quality, innovation, and customization), pricing (fair price and value price), relationship building (easy access, rapid response and relational nurture) and co-creation of the offerings to outperform competitors.” (Ngo & O’Cass, 2009, p. 49).

O’Cass and Ngo (2012) mention that in today’s business, only being market-oriented is not enough for creating value, and companies should try to add value creation capabilities by establishing a strong relationship and cooperate with their customers. The most challenging part of this process is that the companies should, while improving the relationship with their customers, also keep their attention to factors such as the improvement of their main products’ quality. Customers perceive value differently based on their level of knowledge about the competitive offerings available, or based on their experience of consuming value offerings (O’Cass & Ngo, 2012).

Customer value is defined as: *customers’ perceived preference for and evaluation of performance, price and personalization values that facilitate achieving the customer’s goals and purposes in use situation. Customer value represents customers’ perception of the value offerings built in a product* (Ngo & O’Cass, 2010, p. 506-507).

The value offering process of companies is concerned with promoting and introducing their resources to a targeted customer base and trying to involve and attract the customers to participate in resource integration and make them able to realize the value. If resources are not engaged by the customers, the value proposition offered by the companies does not work and does not bring any profit for the company. So any kind of value offering from the firms needs suitable resource integration from the customer side. Hilton et al., (2012) found that value is a function of human experience but Lusch and Vargo relate value to the function of service (Frow et al., 2014). Resources can be separated into two different groups: operand and operant resources. Each one of these types of resources has value potential and these value potentials are realized when the resources are integrated. Operand resources are tangible such as raw materials and usually need to be completed by an operant resource in order to be valuable. Operand

resources have the potential to create value and need operant resources to make their potential value realizable. Operant resources are intangible such as knowledge and skills and they are used on the operand or another operand resource to make their potential value realizable. The same story applies to value proposition and value offering. In fact, the value offering in itself does not have any value in its nature and it needs to undergo a process or application or involve in the integration of resources in order to make its value realizable. When companies and customers interact with each other, each one of them is looking for someone who offers value potential and usually in this process the companies advertise their potential value and offering more overtly than customers in order to attract them, but it is a two-way process and both companies and customers are looking for the one with a high potential value (Frow et al., 2014). In dental industry, the dentists are not that much eager to be involved in value creation process and they like to see more resources from the companies rather than themselves and as it is mentioned, in order to have a successful resource integration both parties should be involved actively in this process. However, in Iran's dental industry, the dentists do not have the ultimate trust in companies and they expect to see more efforts from the companies to keep them satisfied.

The process of value proposition can be considered as a process of discussion and negotiation between involved actors and there should be an initial interest and eagerness in actors to participate in the process of value creation or resource integration and only in this way they can realize the value. When a company offers value to the customers, co-creation of value happens only in a situation that the customer put and share his resource with the company so the customer inputs their resources just once, he sees the resources offered by the company valuable and the companies should be aware of this point that the customers are looking for what kind of resources to see from the company and also what kind of resources they will apply and integrate in this process (Frow et al., 2014).

The value offering of companies should transfer this message to the customers that it is worth customers applying their resources in this process and if they integrate their resources with company, the result and outcome would be suitable and desirable for them. This kind of resource integration

Looks very complex in the context of B2B, because it is not just about customers and companies as there is the possibility of a wider range of actors. Even though the process of resource integration is vital in a co-creation value process, the company should not underestimate the significance of service experience and specifically the value of personal interaction. There should be a direct interaction between actors for a value creation process. When element of service and product offerings goes wrong, the customer considers the company responsible for it, however the customer rarely blames his own resources as the main reason for failure (Frow et al., 2014). Having a successful personal interaction with customers is a key point in dental field. This supports the view of Hilton that value is a function of human experience, so this point plus her perspective about value and co creation are highly important and more logical in Iran's dental market. By focusing more on this issue, the more successful co creation experiences can happen between firms and customers and more trust can be made between these two parties.

It should be further noted that customer resources are dynamic and likely to change over time and it is during the resource integration process that the learning between actors will be happening and the resources will be modified. So, when companies offer value, they should bear in mind that their customers have some learning during the process of resource integration and value creation and their needs can be modified over the time and also the companies should keep their value proposition flexible in order to catch up with the customer changes and their resource modifications (Frow et al., 2014).

In another study, Chen and Myagmarsuren (2013) found that value offering concerns the proposed value that the company makes in its market offering and that is consumed and judged by the customers. Value offering judgment is based on customers' perception and it is a direct message to the companies to prevent them to determine independently their value offerings. While making decisions about their value offerings, the opinions of customers should be directly considered and influencing their decision, and this is regarding all elements of the company's value offering.

The customer aims for those products that deliver offerings with the feature

Of good performance and a proper price, and compares these attributes with the company competitors. It is therefore crucial for the firms to think carefully about what to offer their customers and how to offer it (Chen & Myagmarsuren, 2013).

Totally in comparison with the studies mentioned above, mostly done by Ngo and O'cass and Myagmarsuren, this research puts more focus on the separate effects of each value offering and their constituent elements. In the O'Cass & Ngo studies, only the overall relationship between the value offering elements with customer satisfaction is evaluated. However, the current study went further and revealed the details and nature of each value offering's element as well as of customer satisfaction separately. Besides, the relative importance of the value offering elements is defined in this work. Performance value and pricing are two classic elements of value offering. These concepts mean that customers are looking for products with a fair price and with a high quality as well as innovative features. These two elements are tangible factors of value offering. But, as noted before, the tangible part is not the only part of value offering, as intangible offerings such as relationship with customers and co-creation should also be considered in value offerings of the companies. Firm-customer interaction is essential for any value creation process. Companies with superior value offerings increase their brand equity among the customers. We can conclude that performance, price, relationship-building and co-creation value are the main constructs of value offering. In the following section, these four constructs of value offering are explained thoroughly.

2-2-1. Performance value

Performance value can be obtained through product advantages such as the quality of a product or innovative features of the products, and they can meet customers' needs based on the superior features of the products (O'Cass & Ngo, 2012). Today, customers are becoming increasingly demanding and all these factors place considerable pressure on the companies in order to make them ready to deal with this situation and to be perfect respondents to their customers. In today's business, only offering a quality-product is not enough

to make customers satisfied, and does not transfer a great deal of value to them. Companies should critically consider various points to create value for their customers in terms of product features. By giving superior value to its selected customers, a company can establish improvements in its performance (Woodruff & Flint, 2003). In practice, in the field of dental implant, the least important customers' expectation from the company is to be provided with the products that are exactly what they want and performance value of a company should meet their expectations. In such a specialized field as dental implants, it might be difficult to provide the customer with their needs. It is likely to see some misunderstandings between customers' need and the companies' offers. In fact, if a company wants to have a complete satisfied customer today and brings him/her a great experience, it has to provide products and services that exceed their customer's expectations.

Anderson and Sullivan (1993) argue that companies that provide customers with superior performance value such as product quality and innovative product features can create more satisfaction among their customers.

Kroll et al., (1999) conducted a study on the contribution of product quality to competitive advantage. It is likely for a company with a high-quality product to maintain a competitive advantage and have a better return. The result of the study approved that higher quality increases return for companies. This result is in accordance with the idea that product quality can make customers loyal to their providers and persuade them to repurchase. The result confirms that the company's product quality has a direct effect on its relative market share (Kroll et al., 1999). In dental industry, the normal feature of products do not bring competitive advantage for the companies anymore and the items like normal quality and other common features in this industry have become the minimum standard and they are not considered as an important factor influencing the customer satisfaction. In the contemporary context of the dental implant sector, the expectations of customers about performance of products are very high and attention to the voice of customers is necessary in order to be able to exceed the customers' expectations.

2-2-2. Price value

The element of pricing value is considered as another element of the company's value offering and it is the effort that the company puts into preparing a price that is acceptable by the customers (O'Cass & Ngo, 2011). Unfortunately, the topic of pricing and pricing value have been neglected in research and even though the importance of this topic is obvious for managers and academics, it is difficult to find research about pricing value. Many studies show the connection between price and customer satisfaction, such as the study conducted by Homburg et al. (2005). These findings showed that fair pricing gives the companies the ability to gain a high degree of customer satisfaction (Homburg et al., 2005).

In short, it can be concluded that the pricing value is firms' activity to create the pricing levels that their customers are willing to pay. In fact, if a company wishes to make value, it should use all its capabilities that most other companies do not have and also try to create value for the customers through these capabilities. However, even a company with the ability to make value cannot create this value unless it finds a suitable price for its products. Having the 'right' price allows the company to gain competitive advantage through its value creation process. In fact, pricing in itself is a kind of capability of the company. The prices of companies should be reflecting their customers' dream, and by having a good pricing value, customers can use their resources in the best way. Through a pricing value, companies can create superior resources and capabilities, leading to an economic rent (Dutta et al., 2003). In terms of price, value price and fair price are the two most common terms used in business. Bear in mind that a fair price and value price are different from each other: a price is considered fair by the customers once he feels it is reasonable with respect to the other producers' prices or the average price in the market. However, a value price is considered by the customer as something expensive and more than normal, but s/he is willing to pay it because of the benefits s/he is receiving (O'Cass & Ngo, 2011).

2-2-3. Relationship building value

In today's business environment, building a solid relationship with customers is important, for it makes the customers perceive the company is easily accessible and easy access to a company is generally considered as add-on value by customers. Relationship building value therefore stands for the effort that a company makes in order to create a hassle-free purchase experience for the customers, and in making the relationship enjoyable and valuable (O'Cass & Ngo, 2011). Woodruff and Flint (2003) mention that customers perceive value in two different categories, namely as functional value and relationship value (in a B2B context). Functional value mainly involves factors such as product quality and prices. Relationship value concerns the interaction between suppliers and customers, that is, factors such as enjoying the relationship or feeling taken care of (Woodruff & Flint, 2003). It can be concluded that relationship-building value is the firms' effort to create a hassle-free buying experience and build beneficial relationships with their customers. In many cases, customers purchase from the company thanks to the relationship made between themselves and the company, rather than thanks to the price or quality of the product (Mittal & Sheth, 2001). A relationship should be clearly profitable for both parties (companies and customers) in order to last, and this is a learning process for both parties. With the current method, companies should simultaneously offer value and also take benefits from the customers (Lindgreen et al., 2012). If a company wants to make and maintain a competitive advantage, it is necessary for the company to keep a long-term relationship with their customers, particularly those who are engaged in the value creation process of the company. Managers of the companies should realize such relationships with valuable customers, and through a proper evaluation on the market situation, think of developing customers' knowledge (Lambert & Dastugue, 2006).

A study by Ramani and Kumar (2008) has confirmed that the interaction between firms and customers can increase customers' satisfaction. The authors found that, apart from the quality and price of products, companies should also focus on the interaction with their customers, and that successful

interaction with customers can differentiate their position in the market and make their customers satisfied (Ramani & Kumar, 2008). In terms of dental market, making a good relationship with customers are necessary for the companies and companies should be sensitive to long-term relationships with their customers. Interaction and proper relationship with customers is crucial for the companies in dental implant field in order to make the customers satisfied.

2-2-4. Co-creation

The customer is always a co-creator of value. Interaction between customers and companies is necessary for a co-creation of value process. The traditional separation from customers is replaced by customer involvement (Lusch & Vargo, 2014). Galvagno and Dalli (2014) note that the co-creation of value has made customers and companies so close to each other so that they should not be seen on opposite sides anymore, as the interaction between them is so beneficial for the business improvement.

In a co-creation system, customers and suppliers are in a deeper level of interaction in which it is beyond the price system that traditionally mediates the supply-demand relationship (Galvagno & Dalli, 2014).

Andreu, Sanchez and Mele (2010) define value co-creation as “a structured course of action such that resources are used and activities are performed by the supplier, the customer, and by both parties during interaction” (Andreu et al., 2010, p. 243). The co-creation of value can be considered as the efforts that the company makes to engage customers in the process of value creation in order to establish their personalized consumption experience.

Later in this chapter, the co-creation of value will be explained completely. In such a specialized field as dental implant, co-creation helps companies to be able to make a better buying and consumption experience for their customers. It should be noted that the co-creation is so much reliant on resource integration of both parties and dentists as the customers of dental implants should accept this fact that without their cooperation and willingness about co-creation of value, this process is not doable.

2-3 The concept of value

The concept of value has been discussed in the literature in various ways. In the traditional definition of value, Blocker (2011) believes that value, the one relating to “the ownership of goods or perceived trade-off between benefits and sacrifices within relationships”, is assumed as something that is embodied in products and services (p. 534). In this case, value is “linked to a sequence of uncovering the needs, devising solutions, producing solutions and transferring these solutions to customers in exchange for something else” (La Rocca & Snehota, 2014, p. 4). Holbrook (2006a, p. 212) also explained value as an “interactive relativistic preference experience”. This suggests that the experience defines what is valuable to a customer and not the purchase. Value is influenced by benefits perceived by the customer and the consumption situation (Hennig-Thurau et al., 2002). Raval and Gronroos (1996, p. 22) explain perceived benefits as some “combination of physical attributes, service attributes and technical support available in relation to the particular use of the product, as well as the purchase price and other indicators of perceived quality”. Firms traditionally create value by offering products and services in order to meet the customers’ needs (Lovelock, 2001). Lovelock (2001, p. 19) defined value as “the worth of a specific action or object relative to an individual’s needs at a particular point in time, less the cost involved in obtaining those benefits”.

Value has also been defined from the providers’ point of view as “the economic worth of a customer... or the economic worth of a seller’s product/service offerings to a customer” (Woodruff and Flint, 2006, p. 185). In summary much research has been undertaken related the concept of value to the co-creation processes (e.g., Ballantyne & Varey 2006; Etgar, 2006; Gronroos & Voima, 2013; Helkkula et al., 2012; Holbrook, 2006 a, b; Jaworski & Kohli, 2006; Lusch & Vargo, 2006; Ng et al., 2009; Ng & Smith, 2012; Payne et al., 2008; Sanchez-Fernandez & Iniesta- Bonillo, 2007; Woodruff & Flint, 2006). This body of work explained has the emergence of value and how it is co-created from the customers’ viewpoint and also from different dimensions.

2-3-1 Service Dominant Logic

In 2004 Vargo and Lusch's prominent and influential article was published, introducing and contrasting goods-dominant logic (G-D logic) and service-dominant logic (S-D logic) embedding value co-creation. Primarily, they proposed eight foundational premises of S-D logic, which updated later with two additional premises (Vargo & Lusch 2006). In the original set of premises, number 6 (FP6) referred to value co-creation: "The customer is always a co-producer" (Vargo & Lusch 2004, p.11). Later on, this foundational premise was updated to "The customer is always a co-creator of value" (Lusch & Vargo 2006, p.284). More recently, Vargo and Lusch (2008a) in their service-dominant logic, declared that "value is always uniquely and phenomenologically determined by the beneficiary" and is co-created as actors interact to integrate resources (Lusch and Vargo, 2014). Both Holbrook's and Vargo and Lusch's conceptualization of value put the emphasis on customers as value co-creators. The importance of customers is also obvious in their changing role in value co-creation from passive to proactive subjects (McColl-Kennedy et al., 2012).

Ng and Smith (2012) note that, value is determined by the customer and co-created with the firm at a given time and context, which suggests the firm cannot provide value but offer value propositions. Given that, value is not only achieved by the object but is always connected to the subject and its context presents relevant implications. This also suggests that value is dependent on the "subject's knowledge, understanding and perception of the consequences, and that decisions are based on expected value consequences" (La Rocca and Snehota, 2014, p. 4). As earlier mentioned from the S-D Logic perspective, it is believed that value is uniquely and phenomenologically determined by the actor as beneficiary. Considering the relational perspective in service provision (Storbacka and Nenonen, 2009), it is observed that value originates from different facets of the provider-customer relationship rather than merely embodied in the product or service (La Rocca and Snehota, 2014). This suggests that some value outcomes emerge during the service consumption, which is also evident when actors reflect on the activity or service provided and received (Gummerus, 2013). In

this respect, Gummerus (2013) argues that, outcome determination is considered phenomenological and experiential, which relates to a beneficiary's feeling, thinking, wanting, sensing, imagining, and acting. Therefore, value could be assessed or determined based on the perceived service outcomes. In this vein, the service exchange is performed and agreed by the actors, and both contribute to the creation of value (Gronroos, 2011a). As a result, value for both subjects in the encounter reflects their cognitive elaboration and perceptions, which is context specific and socially constructed (Edvardsson et al., 2011a; Gronroos, 2011a). Hence, since value is "uniquely and phenomenologically determined" by the involved actors, value created and assessed by the customer might be different from that of the provider. In dental industry, this point is highly important and the companies should take it into consideration that in many cases, their evaluation on their offered services or products to the customers are different from the actual customers' perception and that can bring failure for the companies. Each customer has his unique desire, needs, wants and the process of value co-creation for each one can be different from the other ones. The roles of the consumers have completely changed from being passive to an active actor in the service provision process (Prahalad & Ramaswamy, 2000). As mentioned earlier, the concept of service-dominant logic (SDL) is the evolution of the service concept that blurs the roles of the provider and the customer, in this case both actors are regarded as resource integrators to jointly create value (Lusch and Vargo, 2014). In this regard, the provider and the customer collaborate through effective interaction in the service encounter process to co-create value through value-in-use (Payne et al., 2009). However, for value to be created, it is significant to understand what value means to the actors and how this value is perceived (La Roca and Snehota, 2014).

S-D Logic suggests the need for efficient cooperation between the actors in the value co-creation process; however, this has mainly remained conceptual (Fisher and Smith, 2011; Winklhofer et al., 2007) with few empirical studies to test the effectiveness of the assertion in practice (Hardyman et al., 2014). According to the SDL, the knowledge and skills located within the

organization (e.g. the competence of the employees, shared cultures, information systems, and market information), and in the larger environment (e.g. customer skills, national cultures, and institutional frameworks) drive value formation (Echeverri & Skalen, 2011). However, these primary resources can also have a negative effect on the value creation, which can lead to a possible value co-destruction (Ple & Caceres, 2010) depending on how they are integrated in the service exchange (Echeverri and Skalen, 2011).

2-3-2 The process of value co-creation

Based on the concept value co-creation, firms cannot create value completely because consumers are the determinants of value (Heinonen et al., 2013 and Vargo & Lusch, 2004, 2008b). Gronroos (2011b, p. 280) remarked that “the consumer is always a co-creator of value”. However, he added “it is too simplistic to allow for theoretical development or practical decision making in any meaningful way”. As it is evident, it is necessary to examine the co-creation process in order to understand the principals of value creation between the actors in the service exchange. Ple and Caceres (2010) mentioned that the use of available resources congruent to the service expectations leads to value co-creation through the interactions between the two actors. Implicitly, it can be claimed that value co-creation is likely to occur through the effective direct interaction in provider-customer encounters (Gronroos 2011b).

Co-creation refers to processes through which providers collaboratively engage customers to create value (Ind and Coates, 2013 and Prahalad & Ramaswamy, 2004a), with the focus on the foundational concepts of SDL (actors, service, resources, and value). Value in this context is not embedded in the product but in the usage. Thus, there is a shift from value-in-exchange to value-in-use. In effect, the customer’s experience during the usage of the service implies the value that has been created (Gronroos, 2011b ND Gronroos & Voima, 2013). Prahalad and Ramaswamy’s (2000, 2004a) studies, created a platform for value co-creation, which sought to shift value creation from firm centric to the dyadic perspective of the customer and the

provider. This approach also put the emphasis on the customer experience in the service exchange (Payne et al., 2008 and Schmitt, 1999). This is critical considering the social context of the encounter (Edvardsson et al., 2011a) that drives the interactive nature of the exchange between the actors to co-create value (Gronroos & Voima, 2013 and Vargo & Lusch, 2004). The conceptualization of the customer in value co-creation differs from that of co-production. Co-production refers to “engaging customers as active participants in the organization’s work” (Lengnick-Hall et al., 2000, p. 359). In contrast, value co-creation refers to the active involvement of customers in the firm’s offerings to obtain value in use (Ng and Smith, 2012). In this regard, Ng and Smith (2012) remarked that although customers are always considered as co-creators of value through value in use, they may not be always co-producers to the firm’s offerings. They also added that the intention of the customer to “contribute to the firm’s offering through co-production in a way co-create value in doing so, but based on a different proposition from the firm, that of engagement and community perhaps, and create a different value from realization of that proposition” (Ng and Smith, 2012).

Lusch and Vargo (2014) remarked that “value is always co-created” and “uniquely and phenomenologically determined” by the beneficiary. This happens as a result of the changing roles of customers in the market environment. The customer has now become more active and sophisticated due to the availability of information, which leads to the acquisition of knowledge. As a result, the value co-creation experience between individual customers is different and unique because of their different value expectations (Cova et al., 2011 and Williams, 2012). In effect, costumers play a prominent role in co-create value and as Lemke et al. (2011) argued, value creation is crucially affected by the consumer’s usage of the goods or service. Hence, the individual roles of the consumer and the provider cannot be disregarded or misplaced (Gronroos, 2011a, b). The active participation of customers in the value creation process enables them to mutually and simultaneously benefit from the supplier-customer collaboration (Maglio et al., 2009).

Companies need to jointly create comprehensive solutions in order to understand customers' value creation processes. Creating jointly comprises active interaction, transparent activities and including customers in the development of value propositions by using participatory methods such as listening and learning together (Ballantyne & Varey 2008; Ojasalo 2010; Prahalad & Ramaswamy 2004a; Vargo & Lusch 2006).

Vargo and Lusch (2006) believes that co-creation and co-production are considered as two totally different terms and it is emphasized that any kinds of interaction between companies and customer or any participation of customers in the process of service delivery should not necessarily be taken as co-creation. However, Hilton et al., (2012) disagree that value is co-created. They believe that any kind of separation between co-creation and co-production can cause ambiguity for the role of customers and their involvement in consumption and experience. Again, Lusch and Vargo (2006) firmly believe that value and co-creation are directly interrelated to each other and customers have the key role in co-production before or during the consumption, meaning that co-production is just about the involvement of customers in producing services and products. They argue that the customers are always co-creators, but they are free to decide if they want to participate in co-production or not. In response, Hilton et al. (2012) questioned these assumptions and instead claimed that value cannot be co-created. They emphasized on the importance of resource integration and the role it plays in the process of co-creation of value.

2-3-3 Resource integration

In co-creation of value, different actors, customers and companies are engaged in the process and interact with each other and in this process the key point that is happening is resource integration and the actors involved in a co-creation process exchange their resources. (Hilton, T., Hughes, T. and Chalcraft, D., 2012). Interaction between actors involved in co-creation process is not accidentally and on purpose each actor is looking for realizing and perceiving value offering and value perception happens individually and personally and we cannot consider it as co-created. Hilton & Huges (2013)

suggests that referring to resource integration instead of co-production can be very helpful to clear any confusion in co-creation of value and it can be helpful to clarify the co-creation procedure. The term co-production is more based on goods – dominant logic which is in contrast with service dominant logic principals. Also resource integration suggests that companies need to pay attention to their intangible resources to get a real and appropriate competitive advantage (Hilton & Huges, 2013).

By focusing on resource integration we can find out the resources that are shared and contributed by customers and companies. Hilton notes: *service co-creation comprises planned resource integration behaviors by actors with the intention to realize a value proposition* (p. 1507) and that the resources contributed by the actors involved in the co-creation process are the main source of value perception (Hilton et al., 2012)

Grönroos and Voima (2013) argue that the customer should be responsible for creating the interactions, as there is a chance that if the supplier attempts to create interaction *a risk for value destruction always exists and may increase* (Grönroos & Voima 2013, p.141). This notion is related to the view that it might be challenging for the suppliers to know the state of mind of the customer. However, the empirical findings of this study indicate the importance of the supplier being in touch with the customers. Among the cases which adopted a conventional approach, it was clear that there should be more interaction and customers tended to think that responsibility for creating interaction is the supplier's concern (Grönroos & Voima 2013).

The findings of a study conducted by Keranen demonstrate that the pre-conditions are a basic element adopting the co-creation approach. However, adopting the pre-conditions does not automatically lead to co-creation. To adopt a co-creation approach certain *triggers* are needed, i.e. something to encourage and urge stakeholders to co-create. These preconditions and triggers for co-creation are a two-way communication, orientation toward long term relationship, trust and knowing in person, transparency and ubiquitous interaction (Keranen, 2015). In Iran dental industry, this point is crucial and to engage in any co-creation, customers first need to see if the company can be trusted. If they find the company reliable, they will be satisfied and they will

like to interact with the company.

The nature of value is relative and perception of value can be changed with experience, and it is judgmental. The actors involved in co-creation process are different in terms of their resources, abilities, motivation and their perception of value is different from each other. So based on this literature, we can conclude that value is not co-created, and that that service is co-created and value can be perceived and realized rather than be co-created. This realization of value happens through an offering based on resource integration while consumption or experience? The customer is a co-creator but we should bear in mind that companies cannot deliver value and just only they can make value offering and propose the value to customers. (Hilton et. al, 2012).

Proposition and perception of value can be different in B2B and B2C contexts and it seems necessary to distinguish value in these two different areas. So, in the following section, value is explained based on this category. Companies need to present the value offering in the best possible way in order to survive in a competitive market. A superior value offering has become necessary for any companies in any industry. This growing managerial concern is leading marketing managers to question the perceived value of their offering, that is, the value of a product perceived by their customers. Value offering and perceived value in B2C and B2B are different and their differences and unique features in each category are addressed in this section.

2-3-4 B2C value

In terms of value in B2C, philosophy and economics are two major topics affecting all B2C value ideas. Philosophical approaches to value, especially via axiology are characterized by substantial work on the foundations of individual valuation and this thinking has affected some of the research into value perceived by consumers (Holbrook, 1994, 1996, 1999). Holbrook (1994), focused more on how different features of products can be translated to value for the customers. The role of customers' preferences was more

considered in this research and value was related to a kind of preferential judgment made by customers.

Holbrook (1994) also developed a typology of perceived value. He explained perceived value as an interactive relativistic preference experience. In this study, the nature of perceived value was analyzed thoroughly, and the results showed that perceived value includes an interaction between the customer and the product and that it is comparative, personal and contextual.

In economics, although value has been addressed with respect to the idea of exchange value and use value, economists have also pondered the measurement of value in its objective (labor value) and subjective (utility value scarcity) conceptions with the aim of providing a theoretical account of prices. These approaches have formed certain conceptions of value adopted in marketing (Dodds et al., 1991; Monroe, 1990; Zeithaml, 1988). Overall, two criteria can be used to structure the definitions of value in B2C literature, the time at which value is studied and the way it is conceptualized. The first criterion refers to the time at which value is studied in the process of purchase and consumption (Woodall, 2003). Two types of perceived values can be reached in terms of the moments when value is examined. These two types are purchase value and consumption value.

2-3-4-1 Purchase value & Consumption value

Purchase value is defined by Zeithaml (1988) as a result of comparing the perceived benefits and sacrifices associated with the purchasing of a product. This kind of value usually happens before what is on offer is actually acquired and it is based on exchange value in economics and reflects an essentially utilitarian form of valuation. It is all about benefit components like intrinsic and extrinsic attributes and also sacrifices components of value like monetary and non-monetary prices.

Consumption value has been defined by Holbrook (1999) as a relative preference, characterizing the experience of interaction between subject and object. Value arises from the experience of consuming what is on offer. It is all about efficiency and excellence dimensions. Holbrook mentioned a

typology around the following three key dimensions: an ontological dimension (intrinsic or extrinsic orientation), a praxeological dimension (active or passive orientation) and a social dimension (individual or interpersonal orientation). This approach originates in use value and leads to a more hedonic or symbolic conceptualization of value. The perceived value has been conceptualized as part of an analytical approach. Holbrook believed perceived value is a multi-dimensional construct which entails different factors, such as perceived price, quality, benefits, and sacrifices. Well-known authors following this belief are Babin et al., 1994; Huber et al., 2000; Mattsson, 1991; Sheth et al., 1991; Sweeney and Soutar, 2001; and Williams and Soutar, 2000. Besides, two types of perceived values can be reached in terms of the way it is conceptualized; uni-dimensional and multi-dimensional value.

2-3-4-2 Uni-dimensional & Multi-dimensional value

As previously mentioned, the different beliefs developed in B2C may be classified by the way in which value is conceptualized. Based on that, value is defined in two different ways. In the first, authors consider the perceived value as a uni-dimensional construct that we can measure by simply asking the respondents about the value they are getting and the things they are losing in their purchase. This approach is therefore about a trade-off between benefits and sacrifices. It considers perceived value as a one-dimensional construct and a single concept that is measured by a self-reported item. This approach shows no sign of the idea that value is an aggregate concept made of different components (Sanchez-Fernandez & Iniesta-Bonillo, 2007). Some of the famous authors following this approach are Agarwal and Teas, 2002; Brady and Robertson, 1999; Chang and Wildt, 1994; Dodds, 1991; Hartline and Jones, 1996; Kerin et al., 1992; and Sweeney et al., 1999.

In terms of one-dimensional approach, Zeithaml is one of the key authors of this kind of stream and Zeithaml (1988) used Means-end theory in her studies. The Means-end theory was highlighted in a study conducted by Gutman (1982). Means are actually objects (Products) in which people engage, and Ends are valued states of being such as happiness or

accomplishments (Gutman, 1982).

Bolton and Drew (1991) made a model of service assessment including value, in which they provided information that supports Zeithaml's idea believing that value can be context-specific. Results showed that perceived performance levels have an important direct effect on quality and value assessment.

Some other authors believe that perceived value is multi-dimensional. Multi-dimensional approaches have their roots in consumer-behavior psychology and these approaches shows relatively much behavioral conceptualization. In general, multi-dimensional approaches have contributed to the study of value, and are more complex than uni-dimensional approaches.

To begin with, many multi-dimensional studies are based on the Means-End Theory that was the basis for many uni-dimensional studies. Woodruff and Gardial (1996) used the Means-End basis and made the customer value hierarchy that actually brought a framework for managers to organize their thought about customer value. An extended perspective of value can be achieved through this framework rather than any limited focus on only products' attributes.

Woodruff (1997) gives a more thorough explanation of the customer value hierarchy model. Customer value is not something fixed over time and it is likely to change in many circumstances (Woodruff, 1997).

Other researches using the multi-dimensional approach base their work on the utilitarian and hedonic values. The utilitarian value is instrumental, functional and cognitive, and hedonic value is reflecting the entertainment and emotional worth of shopping, that is, non-instrumental and experiential. For example, Lee and Overby (2004) identified two types of online shopping value as utilitarian value (e.g., price savings, service excellence, time savings and selection dimensions) and experiential value (e.g., entertainment visual, escape and interaction dimensions). The results of the study showed that both forms of value positively influence customer satisfaction (Lee & Overby, 2004).

2-3-4-3 Main characteristics of B2C value

However, despite this splitting of the theoretical aspect, several characteristics of value are generally accepted in the B2C literature. First of all, value is the result of a relative judgment made by a consumer with respect to an object (Sinha and DeSarbo, 1998).

Furthermore, many commentators agree that perceived value varies with the type of good and the characteristics of the context of purchase/consumption (Holbrook, 1999 and Zeithaml, 1988).

Finally, the value customers perceive is not static but changes over time (Hansen et al., 2013; Parasuraman and Grewal, 2000). In B2C, the work of conceptualization is undertaken on value (consideration of non-functional dimensions, adoption of experiential approaches), coupled with the development of numerous measurement models (aggregated or analytical, one- or multidimensional). This research context is more related to B2B business and in the following section B2B value is explained from the different aspects.

2-3-5 B2B Value

Value in B2B also originates in part in economics, however, this tends to be in industrial economics, explaining the marked influence of strategy and engineering. Research on engineering, and especially work by Miles (1961), provides a complementary perspective, highlighting the importance in a competitive environment of the supply of value for a firm. Beyond its relative character (related to competition), the research emphasizes the semantic diversity of the notion of value, which varies with the agent in question (value does not mean the same thing for seller and buyer) and the context in which it arises (time, place and use) (Lindgreen and Wynstra, 2005).

In B2B, although value has many meanings, two criteria can be used to clarify the approaches developed, namely the time perspective and the identified beneficiary of value creation. (Lindgreen et al., 2012)

2-3-5-1 Transactional & Relational approach to value

The first criterion involves separating the transactional approach from the relational approach (Lindgreen et al., 2012). In this perspective, the two approaches do not differ in the object that stems from the value (product, service, personal, or suppliers) but in the temporal perspective adopted. Historically, work in industrial marketing has been concentrated on the first approach that assesses value, in the context of trade, as a cost–benefit trade-off relative to a supplier's offer, perceived by decision-makers in the client organization (Eggert and Ulaga, 2002; Ulaga and Chacour, 2001).

In this perspective, some researchers have related the perceived value to value for money (La et al., 2009). Other researchers have extended this trade-off to cover other benefits (performance, design, quality of service, supplier image, etc.) and sacrifices (commodity costs, change costs, etc.) (Anderson et al., 1993; Kumar and Grisaffe, 2004 and Lapierre et al., 1999).

On the contrary, other research has viewed value from a relational perspective (Ford, 2011). The perceived value is then linked to the advantages produced in the course of the relation and leads to adopting an aggregate view of all the transactions occurring between the two firms (Hogan, 2001). In the context of this approach, the relationship, such as the product and/or service on offer, is taken to be a source of enhancement per se (Henneberg et al., 2009; Lapierre, 2000 and Ravald & Gronroos, 1996).

Based on a trade-off approach of value (costs and benefits), benefits and costs are categorized as product-related benefits, service related benefits and relationship-related benefits (Lapierre, 2000). In terms of relationship-related benefits, factors such as trust, the supplier's image, and solidarity with customers are noted, and in terms of relationship-related costs, factors such as time, effort, energy, and conflict are highlighted.

We can see in many studies the several dimensions of the construct, which is either around a trade-off of different relational benefits and costs (Blocker, 2011; Lapierre, 2000; Menon et al., 2005; Ulaga & Eggert, 2005, 2006) or the different dimensions of relational value (Biggemann and Buttle, 2012;

Callarisa-Fiol et al., 2009; Wilson and Jantrania, 1995). Other researchers investigated the process of value creation through relationships (Corsaro et al., 2013; Gummerus, 2013; Lindgreen and Wynstra, 2005 and Pardo et al., 2006).

2-3-5-2 Customer & Supplier and Dyadic perspectives

The second criterion is to categorize approaches in B2B in terms of the stakeholder benefitting from the creation of value. There are three main perspectives that investigators adapt: a client, seller, or dyadic approach (Ulaga, 2001). In the client approach, the value of the firm's offer is defined from the customers' point of view. But, it should be bear in mind that in a relationship, value is not created only for the customer but also for the seller (Purchase et al., 2009).

In the seller approach, Walter et al. (2001) believes that perceived value from the sellers' standpoint are classified as costs (of producing, distributing and putting the product on the market) and of functions directly or indirectly affecting organizational performance (benefits from the dyadic relationship, benefits promoting interactions of the supplier with other agents). Lastly in the dyadic approach, the seller and customer perspectives are integrated which question the creation of value in a collaborative relational context (Sweeney and Webb, 2002; Wagner et al., 2010).

As the relations in a B2B context is becoming more and more important, and in keeping with service dominant logic, this perspective caused the advent of the co-creation value for the parties in the dyad (Ballantyne and Varey, 2006).

Many studies have sought to characterize these value co-creation processes and the nature of the value created jointly by the actors examining the type and the strength of the bonds between stakeholders or the role played by some central stakeholders in the process of value creation (Aarikka-Stenroos and Jaakkola, 2012; Corsaro et al., 2012; Jaakkola and Hakanen, 2013; Sweeney and Webb, 2002).

Although there are different views about perceived value, there is an agreement about a number of characteristics in B2B literature as perceptions

of value are relative particularly in terms of the competition (Ulaga and Chacour, 2001). Also, customer perceived value can be taken as a performance indicator for the company compared with the leading competitors. Finally, perceived value is dynamic (Eggert et al., 2006).

2-3-5-3 Main characteristics of B2B value

Overall, in B2B, there is an emphasis away from a transactional vision focused on the customer and toward relational visions integrating forms of value co-creation. In B2B, the perceived value of an offer has been addressed primarily through economic and functional considerations (materialized by the cost–benefit computational approach). The objectives of the organization, the pressure within the purchasing department and the strategic importance of goods and services in B2B also plead in favor of the predominance of a utilitarian perspective on value (Corsaro & Snehota, 2010 and Hansen et al., 2008).

This conceptualization has led to very little scope being given to the more emotional and symbolic aspects of value (Callarisa-Fiol et al., 2011 and Ulaga & Chacour, 2001). More specifically, non- economic aspects such as feelings, atmosphere, or positive emotions emerged as being important in establishing lasting customer–supplier relations (Andersen & Kumar, 2006). Cova and Salle (2000) underscore that mutual interests of the parties in the transaction create a suitable atmosphere for sustaining the relationship over the course of time. The analysis of perceived value of a B2B offer must, therefore, include more components that are not related exclusively to economic and rational aspects (Hansen et al., 2008).

There is a new approach towards value that is founded on the service dominant logic. As discussed earlier, in this approach value exists in the phenomenological experience of the customer is not limited to a product or a service. In this approach, the customer is not passive, but instead is highly active in the process of value creation. Companies cannot make value alone. They offer value and customers decide to make value together with the company. This research is about B2B context and in Iran's dental industry,

so, the relationship between the companies as sellers and the dentists as buyers is very important and also dyadic perspective together with co-creation of value are more practical and relevant in this market.

2-4. Customer satisfaction

In the past, companies provided services and products to customers based on their own definition of quality, and they believed that their customers should be satisfied with their performance. As companies were providing quality service in their own eyes, they did not consider the expectations their customers may have, and how their expectations or preferences may differ from their own. Today, the situation is different. Customers' expectations have become the central point of focus for companies, and companies identify and consider these seriously in shaping their strategies. If a company performs below customers' expectations, this leads to dissatisfaction, and when a company performs above customers' expectations, it creates to satisfaction (Oliver, 2006). The majority of recent customer satisfaction studies have been influenced by the disconfirmation paradigm which is explained in the next section.

2-4-1. Disconfirmation Paradigm

The disconfirmation paradigm was originally proposed by Parasuraman. The paradigm argues that customer satisfaction is gained based on a comparison made by the customers between perceived performance value and other standards such as expectations. When customers feel that product performance equals their expectation, they are satisfied (confirming); when product performance is above their expectations, customers are very satisfied (positively disconfirming); however, when it is below their expectations, customers experience dissatisfaction (negatively disconfirming) (Parasuraman et al., 1998)

Customers assess a service or product performance, and the result of this evaluation is compared to their expectations before the purchase or consumption. Any incompatibility or lack of similarity brings disconfirmation.

Positive disconfirmation leads to satisfaction, and negative disconfirmation leads to dissatisfaction (Andreassen & Lindestad, 1998).

Anderson & Sullivan (1993) define satisfaction as a function of perceived quality and disconfirmation, meaning the extent to which perceived quality fails to match the expectation before purchase.

In dental industry, the competition between companies is very high and meeting the customers' expectations is necessary for the firms and positive disconfirmation is the key of success for the companies in Iranian dental market. The companies need to exceed the customers' expectations and making positively disconfirming situation brings competitive advantage for them.

2-4-2. Perceived value and customer satisfaction

There is an ongoing debate in the literature regarding the similarity of difference of the notions of perceived value and satisfaction. Some authors, such as Rust and Oliver (1994) believe that both of these constructs depend on the consumption context, and that both of them contain aspects of costs and benefits. In addition, although the two constructs have certain similarities, there are major differences such as that satisfaction is a post-purchase concept and perceived value is either a pre-purchase or post-purchase construct. The other major difference is that satisfaction concerns how well a value offering is perceived by the customers and provides guidelines to improve current products, whereas perceived value rather plays a role on a strategic level, showing future directions for creating value for customers and meeting their requirements (Sanchez-Fernandez & Iniesta-Bonillo, 2009).

In 2002, Eggert and Ulaga explored customer perceived value and the customer satisfaction relationship, and in particular whether customer perceived value was a substitute for satisfaction in business markets. The result showed that these two constructs are not the same and that they can rather be considered as complimentary factors. The model in the study, revealing that customer satisfaction plays a mediating role between customer perceived value and behavioral outcomes, that perceived value has a

positive influence on customer satisfaction, and that customer satisfaction positively affects behavioral outcomes. In previous studies, satisfaction was based on the disconfirmation paradigm, but in this study it was argued that customer satisfaction is related to customer perceived value, as customers' perception of the value offering could be considered a measurement for their satisfaction.

It was explained that value offerings can meet the customers' requirements and that values can be created for the customers on a strategic level. It was found that satisfaction is more about the customers' assessment than about the company's value offering in itself. In fact, the customer's value measurement depends on their comparison between the value offerings of the company and its competitors. Customer satisfaction is considered as an affective factor whereas customer perceived value considered a cognitive factor. The study confirmed that these two constructs are different from each other and that they complement each other, and that customer perceived value is not a substitute for customer satisfaction (Eggert & Ulaga, 2002). Spiteri and Dion (2004) conducted a research to shed more light on customer value and overall satisfaction. Their objectives were to investigate the effect of perceived product benefits, perceived strategies benefit, perceived personal benefits, perceived sacrifice and perceived relationship benefits on customer value, and also to link the measurement of customer value to outcome measures, such overall satisfaction. This study differs from the previous ones, in that the root of customers' value was based on the perspective of the customer rather than on that of the seller. The results showed that perceived product benefits, perceived strategies benefits, perceived personal benefits, perceived sacrifice and perceived relationship benefits have positively affected customer value, and also that customer value positively affected on overall satisfaction, end-user loyalty and market performance (Spiteri & Dion, 2004).

As explained earlier in the literature the perceived value contains the items like perceived performance value, price value, relationship value and co creation value and as it is mentioned above the perceived value by the customers affect positively on satisfaction. In dental industry in Iran, perceived price value has a huge positive effect on customer satisfaction.

Many studies show the connection between price and customer satisfaction, such as the study conducted by Homburg et al (2005). These findings showed that fair pricing gives the companies the ability to gain a high degree of customer satisfaction (Homburg, Koschate and Hoyer, 2005). Many other studies show the positive effect of other forms of perceived value on customer satisfaction. So, the perceived value of customers and their satisfaction are related to each other and many scholars see the customer satisfaction from this perspective.

2-4-3. Desired value and satisfaction

Woodruff and Flint (2003) discussed a theoretical model about customer satisfaction. Starting from the first step of the model, the customer starts by making comparisons. They perceive the amount of the value that a company offers them, and this can be perceived as good or bad. This is based on the comparison that customers make based on certain standards. Customers use various standards, one of which can be the desired value. For example, the desired value of a customer is on-time delivery, and this customer then compares the value offered by the companies based on this particular standard.

The standard can also be based on the value offered by competitors, leading the customer to compare the value offer of the company and that of the competitors. The overall satisfaction stems from this comparison of companies' value offerings with pre-set standards in customers' minds, and the level of satisfaction depends on this comparison. In the second step, we have the customer satisfaction feeling, which concerns customers' overall feeling about the value received from a supplier. This feeling is usually explained by emotional words such as satisfied, unsatisfied, excited, and disappointed. Satisfaction could differ from being positive or negative, or from mild to extreme. The last point in this study is about the customer satisfaction outcomes. This refers to how customers behave in the market. For example, customers who are satisfied with a company's performance are likely to repurchase from this company, and tell others about their products or services and thereby spread positive word-of-mouth to other customers.

Such customers stay loyal to the supplier (Woodruff & Flint, 2003)

Apart from overall satisfaction, companies usually like to know to what extent customers are satisfied about their different value offers' element, and satisfaction measurements can help companies to understand their performance in different sections based on the perceived value of the customers. It is important for companies to analyse customers' satisfaction in different aspects of their performance and to not rely too heavily on only the overall satisfaction rate (Woodruff & Flint, 2003).

Sometimes companies and customers think differently, even when companies know about the wants of their customers. For example, a company might have understood that on-time delivery is customers' want, but they define on-time delivery as two weeks, whereas the customers desired value of on-time delivery is a delivery within two days. There can thus be a serious difference between what a supplier's personnel think customers want and what customers truly desire. Companies should therefore find out in detail what customers want and how they should perform to make customers happy (Sharma & Lambert, 1994).

2-4-4. Marketing mix and satisfaction

One of the concepts related to customer satisfaction is the marketing mix. Marketing mix can be used to measure customer satisfaction. Marketing mix contains the 4 Ps (Price, Product, Promotion, Place), is considered as one the main factors in marketing strategies, as these variables directly influence companies' equity value (Lee, Ko, Tikkanen, Phan, Aiello, Donvito, Raithel, 2014).

The marketing mix involves four distinct, well-defined and independent management processes. It is a conceptual framework that consists of the main principal that managers consider while making decisions, in order to make the companies' offering the best possible match with customers' needs. The marketing mix is a powerful concept that is considered as a facilitator in the marketing field, in terms of its ease of use, and because it can have great influence on a firm's competitive position. All factors of the marketing mix are important, and shortage in any can lead to weaknesses in

the company (Goi, 2009). Customers will be satisfied and purchase again from a company if they get motivated positively by the company's marketing mix. The elements of the marketing mix can positively influence customer's overall perception and satisfaction (Lee et al., 2014).

Overall satisfaction is the feeling that a customer may have as a reaction to the assessment of a usage experience with a product and other elements of marketing mix. In detail, at the time of assessment, the customers start to form opinions based on their learning from past and present experiences about what their desired value is. And based on the customer value hierarchy model, the desired value is made of preferences for specific and measurable dimensions and these dimensions are linked to goals for the use situation. The desired value guides customers when they shape perception of how good or bad the elements of marketing mix has served in the use situation. The marketing mix elements are used in this study in order to measure customer satisfaction.

2-7. The Gap in literature

The number of studies conducted on value and on related topics of value is very limited. Woodruff (1997) points out this issue by arguing that we need more value theory in order to understand customers' world better. The situation is worse in the case of literature on the value offering concept, as this literature review has shown there are only few studies focusing on companies' value offering.

Another limitation is that most of the research on the value creation process and on value offerings is conceptual, meaning there is a lack of empirical research on the value creation process, in particular on companies' value offering from a customers' point of view.

There likely is a difference between what managers think is a proper value offering, and that customers believe is a suitable value offering.

Success of a company is so much dependent to this matter that to what extent the companies realize what value customers are after in companies' value offering. This area needs further attention, in terms of improved value measures and more empirical research. There is a considerable gap in the

literature regarding value offering, especially from the customers' perspective.

It is now important to take the customers' perspective. When considering value creation from a firms' perspective, it is impossible to know exactly how customers are perceiving customers' value offering. In analyzing the value offering of companies' from customers' point of view, customers can be enabled to directly decide and interpret the value offering of the company themselves, and share with the companies what factors should be considered while making value.

In addition, in most of the existing studies, the value offering (or the elements in it) is evaluated in terms of their relationship to or effect on the financial performance of the organization such as profit and sales. Instead, it is necessary to focus more on customer associated performance, such as customer satisfaction or customer retention, as well as the relationship between value offerings' elements and customer oriented performance. The customers lead to profit for the companies. They are the most crucial assets of the companies: without customers, the value offering of even the best companies would be useless.

In short, non-financial organization performance, in particular in relation to customers, is not considered in the value offering literature. The measure of a value offering company's success could be considered based on customer satisfaction rather than any financial performance.

Clearly, there are a very limited number of studies (especially empirical studies) that look at the value offering concept and the contribution of this value offering to company success. Very few studies evaluate all elements of value offering together. For example, there are various studies about pricing value and about co-creation of value, and about their relationship with the value creation process or customer satisfaction. However, very few studies consider value offering in terms of different elements and dimensions together.

This study attempts to address the above issues. It evaluates the company value offering in terms of different elements such as pricing, performance, relationship, and co-creation, and it analyzes their effects based on a non-financial factor that is customer satisfaction. Besides, this study explores

value offering of the company from customers' perspective, which is rarely done in the literature.

The study adopts the theoretical framework from O'Cass and Ngo (2011), which is modified into a conceptual framework of value offering from the customer's perspective.

The model is shown below. This model theorizes that value offering is a mix of performance value, pricing value, relationship building value and co-creation value, and that delivering superior performance in these aspects can lead to customer satisfaction. It can be used to examine the contribution of value offering elements to customer satisfaction.

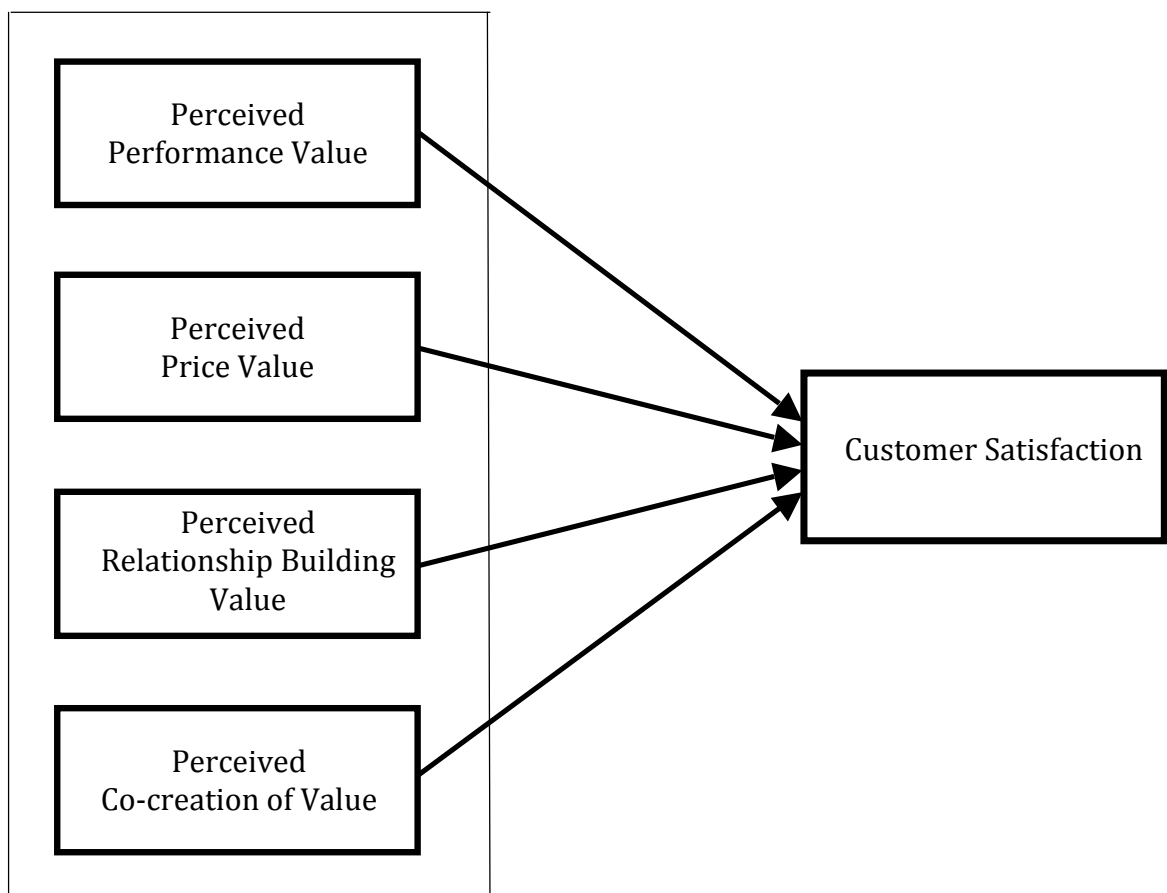


Figure 2-2: conceptual model

2-8. Development of hypotheses

The research objectives of this research study are:

1. To understand the relative importance/priority of value offering elements.
2. To understand the nature of customer satisfaction.
3. To identify relationship between the elements of a value offering and customer satisfaction.

To answer the research objectives above, this research will address the following research questions:

RQ.1 What are the most and the least important elements of a value offering?

RQ.2 How do the elements of a value offering influence customer satisfaction?

The research hypotheses are formulated in the basis of the research questions

As it is earlier mentioned in value offering section of this chapter, performance value is the effort that a company puts into its strategies in order to be responsive to their customers' needs, and this performance value is delivered through making high-quality and innovative performance features that match their customers' preferences. The perceived performance of service quality influences the satisfaction judgment of the transaction and the value perception. So, we will propose the first hypothesis of the study as follow:

Hypothesis 1: Perceived performance value significantly and positively impacts customer satisfaction.

As mentioned in this chapter, price value is one of the elements of value offering and it happens many times to managers that they do not consider the role of prices in satisfying their customers. The managers transfer value

to their customers, but in reality, many customers perceive this value only when they pay a reasonable price for their purchase. Most customers have a reference price in their mind and they are satisfied with their payment only when they feel that the price is fair or valuable. Unfortunately, the topic of pricing and pricing value have been neglected in research and even though the importance of this topic is obvious for managers and academics, it is difficult to find research about pricing value. The second hypothesis of the study is as follows:

Hypothesis 2: Perceived price value significantly and positively impacts customer satisfaction.

Another construct of value offering is relationship value. In today's business, building a solid relationship with customers is important, for it makes the customers perceive the company is easily accessible and easy access to a company is generally considered as add-on value by customers.

Relationship-building value is the firms' effort to create a hassle-free buying experience and build beneficial relationships with their customers. We can reach to the third hypothesis:

Hypothesis 3: Perceived relationship building value significantly and positively impacts customer satisfaction.

Co-creation of value is another construct of value offering. The customer is always a co-creator of value. Interaction between customers and companies is necessary for a co-creation of value process. In a co-creation system, customers and suppliers interact with each other beyond the price system which traditionally mediates the supply-demand relationship. In short, co-creation of value is company's effort to increase interaction with customers in order to co-create the consumption experience. So, the forth hypothesis is considered as follows:

Hypothesis 4: perceived co-creation of value significantly and positively impacts customer satisfaction.

2-9. Summary

This second chapter reviewed the literature related to value, customer's perceived value, value offering and customer satisfaction. All literature related to the elements of value offering, including performance value, pricing value, relationship building value, and co-creation of value were discussed in detail. Differences of the nature of value in B2B and B2C context is explained completely.

At the end of this literature review, the gap in the existing body of literature was discussed, and a theoretical framework was proposed that shows the implication of various value offering elements, and also the development of hypothesis is mentioned comprehensively. Using the framework as a guide, this thesis aims to provide a comprehensive understanding of value, perceived value and value offering of the company, as well as to conceptualize the value offerings of the company from a customer's perspective.

Chapter 3 – Methodology

3-1. Introduction

This chapter justifies and describes the research design and strategies used to address the research objectives. First, the paradigm of the study and the philosophy behind it are discussed. This is followed by, a description of the approach, instrument development, sampling, implementation, data management and analysis procedures. Since this study involves human participants who were customers of a named company, ethics approval was needed and the University of Bradford processes are also described here.

3-2. Paradigm

A core issue for researchers is to choose an appropriate methodology. There is often a dilemma between using qualitative, quantitative methods, or a combination. This means that it is crucial to first consider the appropriate paradigm before choosing the method. A methodology is only one of the three elements of a paradigm that the researcher works with. The other elements are the ontology and epistemology. Ontology concerns reality, it is the study of reality and the nature of being. It is the study of being or existence. It asks what actually exists.

Epistemology is the relationship between that reality and the researcher; it is the study of origin and nature and the extent of knowledge. Epistemology defines how we can create knowledge. It asks how we can know the social world. Finally, methodology concerns the techniques used by the researcher to discover that reality. It covers the ways of approaching the different stages of research (Sobh & Perry, 2006).

When exploring the way, we perceive and know our social world and how we know what exists, ontology and epistemology are at the basis of these answers. Our research is influenced with these two terms consciously or

unconsciously. A paradigm is an overall conceptual framework within which a researcher works and it is considered as the basic belief system or worldview that guides the researcher. Paradigm issues are very important, as a paradigm informs and guides a researchers' approach. It is therefore necessary for a researcher to be clear about the chosen paradigm before starting any research. A paradigm brings a conceptual framework through which to see and make sense of the social world (Guba and Lincoln, 1994). There are two main research paradigms, positivist and phenomenological. (Hussey and Hussey, 1997).

Positivism is more related to quantitative methodology, because it contains the ontological and epistemological prescriptions that show how this methodology should conduct research. Saunders, *et al.* (2009) explain that the researcher assumes the role of an objective analyst, building detached interpretations of the data, which have been collected in a value-free manner, and the approach also assumes that the researcher is independent of the research. Positivism assumptions are based on the fact that science quantitatively measures independent facts about a single apprehensible reality (Guba & Lincoln, 1994; Tsoukas, 1998). This is a very commonly used paradigm in business school research.

Auguste Comte (1798-1857) was a French philosopher who founded the positivism paradigm. He believed that society could be improved by the application of positivism. Positivism is considered scientific and mechanistic (Crotty, 1998). It involves cause and effect and says that the world is predictable. It is looking for generalisation, order, structure and causes. For a positivist, there is only one reality. Data are value-free and they do not change, and as a result of this, they have been observed. Positivism leads to theories. It consists of objectives and material things (Healy & Perry, 2000).

Mostly, objective values are used in a positivist research paradigm to reveal an understanding of human behavior. Theories, variables and hypotheses are used extensively in positivism. It is quasi-scientific in nature and numbers, statistical methods for analysis are mostly used in positivism.

Statistical methods in quantitative research: *seek to explain and predict what happens in the social world by searching for reliability and causal*

relationships between its basic elements (Burrell and Morgan, 1979, p. 5).

The positivist approach is far more reliable in studies when the objective of the research is to gather data related to the regularity of occurrence of phenomena. In positivism the observer is independent from what is being observed. Objective criteria is crucial to define the choice of what to study and how to study it and we can say that positivism is value – freedom.

Positivism says that the aim of the social science should be to identify causal explanations that explain regularities in human social behavior. In positivism an adequate sample size is necessary in order to generalize about regularities in human and social behavior which is one of the main aims. Positivist beliefs concepts need to be operationalized in a way which enable facts to be measured in quantitative way (Easterby-Smith et al., 2008).

On the other hand, phenomenology is the science of phenomena; as such, the phenomenological paradigm is concerned with understanding human behavior from the participant's own frame of reference (Hussey and Hussey, 1997). The view is that 'reality' is not objective and it is socially constructed and given meaning by people (Easterby-Smith, et al., 2008). The focus should be on what people, individually and collectively, are thinking and feeling and attention should be paid to the ways they communicate with each other, either verbally or non-verbally. Thus, a researcher should try to understand and explain why individuals have diverse experiences, rather than searching for external causes and fundamental laws to explain behavior. In phenomenological research, the observer is part of what is being observed and human interests are the main drivers. In phenomenological research the aim is to increase general understanding of the situation. In terms of sampling, small number of cases is chosen for specific reasons and leads to more theoretical abstraction rather than generalization in phenomenological.

In terms of philosophical stance, the positivist paradigm follows a deductive approach, starting with the development of hypotheses and data collection. The phenomenological approach applies induction, the process of finding a case, observing the relationship and finally building up a theory to cover all cases (Baroudi and Orlikowski, 1991). According to Cavana and Sekaran

(2001), positivism design begins with supporting the theory, developing the hypothesis, gathering and analyzing data, and at the end accepting or rejecting the hypotheses. However, a phenomenological approach begins with observation of phenomena, analyzing patterns and themes, formulating relationships and then developing a theory, support for the theory and hypotheses. This research aims to examine the factors and determinants affecting customer satisfaction, with particular emphasis how elements of value affect customer satisfaction in a B2B context.

In detail, a set of hypotheses has been developed from the literature review and based on existing theory, which has been conceptualized in a process model that proposes causal relationships of constructs. Based on a theoretical framework, this research focuses on theory testing and verification rather than theory generation. By considering the mentioned points, this research adopts the epistemological paradigm of positivism, based on objectivism as the underlying ontological position. However, although this research predominantly takes a positivistic stance focusing on quantitative research methods, the following section gives a rationale for considering mixed methods and triangulations as beneficial concepts for this research.

3-3 Mixed method and triangulation

The approach used by a researcher to construct theories depends on the researcher's perceptions of the social world. Quantitative research covers basic characteristics, such as emphasizing a deductive approach and theory testing (Corbetta, 2003; Cresswell, 2009), following the natural science model and positivism in particular. Thus, quantitative research rather considers social reality as being an external reality and builds on the ontological stance of objectivism (Bryman and Bell, 2007).

On the other hand, qualitative research offers key characteristics, such as putting an emphasis on words instead of numbers, taking an inductive approach and emphasizing theory generation. Moreover, qualitative research generally rejects a natural science approach, but rather considers how

individuals interpret the social world, and refers to the ontological orientation of constructivism (Bryman and Bell, 2007; Cresswell, 2009).

In summary, while qualitative research is concerned with “understanding the social world through an examination of the interpretation of that world by its participants” (Bryman and Bell, 2007, p. 401) quantitative research focuses on theory testing and embodies a view of social reality as an external objective reality. Over the years, there has been much criticism associated with each of the two methods. Quantitative methods are unlikely to be sensitive enough to capture the nuances of respondents’ attitudes and behaviors (Malhotra and Birks, 2003) and tend to be very poor at tapping the subjective dimension of behavior (Marsh, 1982). In addition, the quantitative approach has been argued to be superficial, to use measurement processes based on artificial precision, to separate the social world from the individual and to generally neglect the complexity of the social world (Payne and Payne, 2004; Bryman and Bell, 2007).

On the other hand, qualitative methods are criticized for not being scientific, biased by the researcher’s subjective view, difficult to repeat and restricted regarding the generalization of results. Qualitative approaches tend to ignore representative sampling, since their findings are based on a single case or only a few cases (Malhotra and Birks, 2003).

The general contradictions between the two approaches have led to a battle between theorists and researchers who solely advocate either the quantitative or qualitative paradigm (Tashakkori and Teddlie, 1998). What has been labeled ‘paradigm wars’ was based on the perspective of research purists, arguing that quantitative and qualitative methods are incompatible (Tashakkori and Teddlie, 1998, p. 11), based on the notion that: *research methods carry epistemological commitments*” and that “*quantitative and qualitative research are separate paradigms*” (Bryman and Bell, 2007, p. 643).

However, several authors have criticized the dichotomization of the two research methods, demanding a more pragmatic approach in order to overcome this battle (Tashakkori and Teddlie, 1998). Newman and Benz

(1998) suggested that quantitative and qualitative approaches should not be viewed as polar opposites or dichotomies; instead, they represent different ends on a continuum. In order to draw from the strengths and minimize the weaknesses of both quantitative and qualitative methods in a single research study, mixed methods were employed in the present research (Teddle and Tashakkori, 2003; Johnson and Onwuegbuzie, 2004). Based on this paradigm, researchers are able to combine both research methods, which leads to the concept of triangulation (Tashakkori and Teddle, 1998).

Triangulation entails using more than one method or source of data in the study of social phenomena. The term has been employed somewhat more broadly by Denzin (1970, p. 310) to refer to an approach that uses “*multiple observers, theoretical perspectives, sources of data and methodologies*”.

When applied to the present context, it implies that “*the results of an investigation employing a method associated with one research strategy are cross-checked against the results of using a method associated with the other research strategy*” (Bryman and Bell, 2011, p. 631).

Although this research study predominantly adopts a positivistic paradigm, it acknowledges the benefits of a triangulated research approach by integrating inductive investigation methods in the first phase of the research. This means that gathering qualitative data in the first phase precedes the collection of quantitative data. Qualitative research is initially conducted in order to gain a deeper understanding of the nature of the research problem and the concepts of interest and to generate additional measurements by which to develop the questionnaire for the main study. In the context of this study, the qualitative research tool used is semi-structured interviews.

The qualitative research is conducted with the hope that the information acquired during the interviews will give the researcher, not only a better insight and understanding of the research phenomenon, but, at the same time, acquire additional measurement items concerning the research settings. This form of research design is known as ‘sequential exploratory design’ (Cresswell, *et al.*, 2003). The main approach here is quantitative, while the subordinate method is qualitative. This is particularly similar to an example given by Cresswell, *et al.* (2003) where the main approach was a

quantitative study based on theory testing, but with a qualitative interview component in the data collection phase.

The qualitative data analysis has two purposes; firstly, to generate qualitative findings for the purpose of methodology design (in this case the generation of the quantitative instrument, i.e. survey questionnaire) and, secondly, to feed into the main qualitative findings of the study, as this research employed a mixed methods research. This is because a combination of qualitative and quantitative methods allows for the construction of more sensitive survey instruments, as well as a better and broader understanding of the phenomenon of interest (Cresswell, *et al.*, 2003; Cresswell, 2009).

With regards to the types of triangulation, this research applies methodological triangulation that is associated with the use of both qualitative and quantitative methods and data to study the same phenomena within the same study. In particular, this research triangulates research methods for the following main reasons. Firstly, the literature review has revealed that research regarding value offering and customer satisfaction from a customer perspective has generally been neglected. Secondly, carrying out qualitative exploratory fieldwork gives further insight into subject construct, which leads to a better understanding and definition of focal construct. Consequently, interviewees' expertise on the subject matter provides valuable scrutiny of the causal process model and the proposed hypotheses of this research. (Bryman and Bell, 2011).

Qualitative data derived from participants' views is beneficial for the development of measurement scales. In addition, qualitative data are used to reflect on the outcome of the main quantitative research, to deepen subsequent data analysis and, consequently, to enrich explanation of the findings. Figure 3.1 shows the mixed method procedure used in this study.

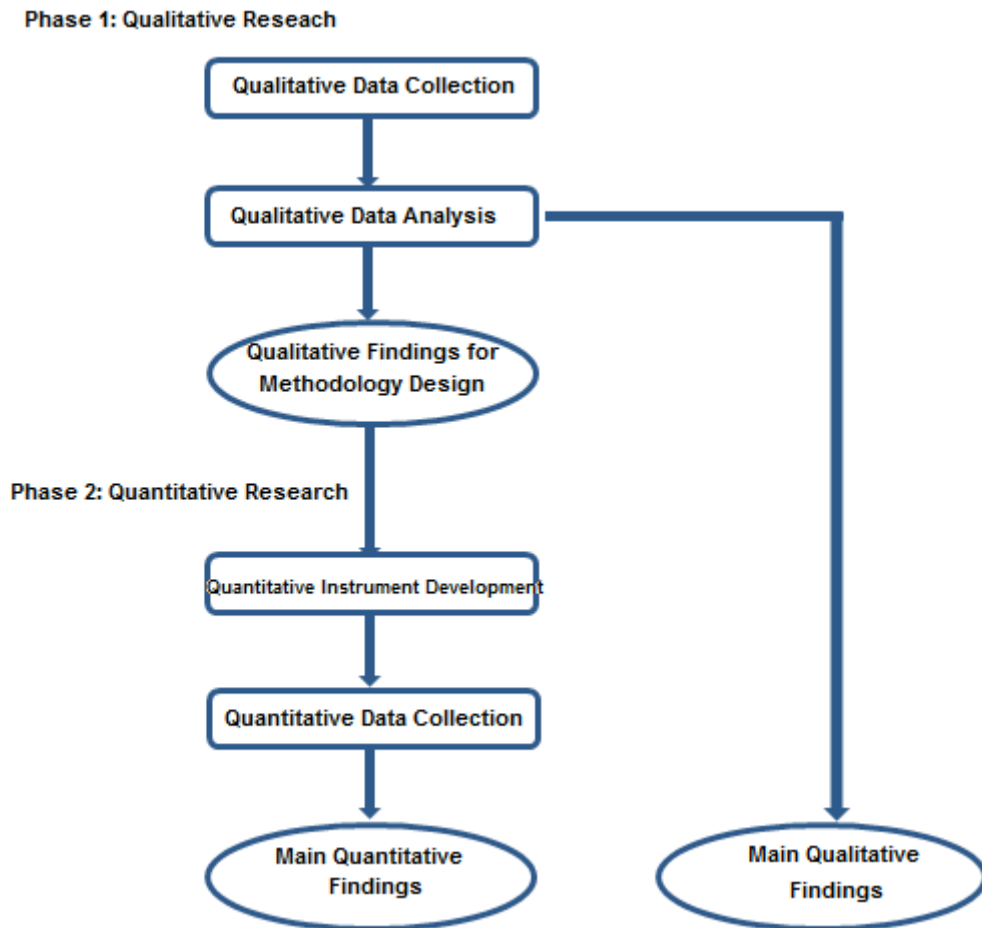


Figure 3.1: Mixed method procedure

3-4 Abductive approach

This study consists of two phases. The first phase is exploratory and inductive to bring more data and information through in-depth interviews for the second phase of the study. The initial framework and gathered data in stage one will contribute to the second phase of the study, which is more deductive. This research contains a mix of both deductive and inductive approaches. Realists say that there are differences between social and natural objects and that different methods are necessary to investigate each of them.

This research takes an abductive approach. The core idea of the abductive approach is that the researcher moves between the theoretical and empirical

worlds and accepts the incompleteness of thoughts and takes non-linear approaches throughout the research to deepen both theoretical and empirical understanding (Dubois & Gadde 2002). The abductive approach is to an extent inductive in attempting to theorize the knowledge gained through empirical enquiry rather than deductively testing the theory. However, the abductive approach attempts to understand the theory related to gain pre-understanding and to generate a conceptual framework which constitutes the foundation of the study and can lead to understand the phenomenon in a new way (Kovács & Spens 2005). This study moves between the theoretical and empirical worlds and accepts the incompleteness of thoughts, taking a non-linear approach throughout in order to deepen both a theoretical and an empirical understanding of value offering.

3-5. Methodology

Panneersevam (2004, p. 2) has defined methodology as “a system of models, procedures and techniques used to find the results of a research problem.” Another definition of methodology has been given by Schwandt (2001, p. 161), namely: “A theory of how inquiry should proceed. It involves analysis of assumptions, principals, and procedures in a particular approach to inquiry. Methodologies explicate and define the kinds of problems that are worth investigating; what comprises a researchable problem”.

The methodology used in the present study is a case study. This method allows an investigator to gain an in-depth understanding of and obtain maximum information about a particular case (Creswell, 2013). A researcher wants to discover as much information as possible related to a company, and this methodology allows the researcher to extract the necessary detail and completely focus on the company.

Both quantitative and qualitative approaches are used for collecting and analysing the data. In addition, the chosen paradigm of this study is realism and the case study methodology perfectly suits the realism paradigm. Easton (2003) states that the collection of data in a case study is an advantage for the researcher, for it enables him to look for the processes and structures

that are not likely to be evident quickly and they are usually found in an on-going data collection process (Easton, 2003).

3-6. Approach

The mixed method approach is used for this study. Bergman defines the mixed method approach as “The combination of at least one qualitative and at least one quantitative component in a single research project or program (Bergman, 2008, p 1). Using mixed methods leads to a better understanding of the problem because you can take advantage of the strengths of both quantitative and qualitative methods, and you can acquire more comprehensive results by using a wider range of techniques and methods. It also enables different research objectives at different research phases and also the opportunity to generalize from exploratory findings (Creswell & Clark, 2007). Besides, mixed method is a popular approach in studies that are based on the realism paradigm. In the mixed method approach used in this study, exploratory qualitative interviews are followed by a quantitative survey.

In an exploratory sequential in which quantitative data collection is dominant, smaller qualitative data can assist and guide the data collection process of the main quantitative study, for example an interview helping to develop survey topics and instruments. Data collection in an initial phase can support and prepare the next phase of the study. The qualitative method is used to feed the quantitative part of the study. In contrast, in an explanatory sequential with quantitative study dominancy, the smaller qualitative study helps to interpret the result of the main quantitative part of the study (Guest et.al, 2012).

In the qualitative part of this study, the scales related to the value offerings of Mehr Teb Asia are explored and feeding the quantitative study. In the quantitative part, these explored scales are getting refined, and the results of the quantitative part also become more meaningful through the help of the data gathered in the qualitative parts which consist of in-depth interviews. This means that in this study, both exploratory and explanatory objectives are covered. Qualitative sections of this study make the necessary scales

and constructs for the quantitative part, and also enriches the meaning of the results of the quantitative part of the study.

3-7 Research Design

Research design can be considered as an overall strategy which guides the data collection and analysis of a project and is the framework or plan for a study (Churchill, 1995).

Based on the presented benefits of the triangulation of research methods, this research study employs qualitative and quantitative methods, which leads to two research phases.

The first phase, which precedes the main quantitative survey, embraces exploratory fieldwork. In detail, conducting semi-structured interviews with satisfied and unsatisfied dentists to gain an insight into and deeper understanding of the research topic, at the same time revealing additional dimensions of the topic that might not have been derived from existing literature.

The second phase of the research study was associated with the main quantitative survey. This phase began with the development of the survey questionnaire, based on existing literature as well as data from the qualitative phase. Subsequently, the measurement scales were purified using qualitative techniques.

Finally, the main quantitative data collection, using a printed questionnaire, was conducted. In order to define items that measured the constructs used in this research, the procedure of multi-item scale development proposed by Churchill (1979), which integrates qualitative research as a preceding phase of item generation, was employed.

The key steps within the research designed to carry out the research process within the present study are illustrated in the form of a flow chart, as seen in Figure 3.2.

Overall, the research design process is categorized into three major steps. The first step is 'research design' and aims to establish and generate research hypotheses based on constructs relationship (see the conceptual framework in Chapter 4).

The generation of hypothetical framework requires a review of published literature (Chapter 2) related to the main aim and objectives of the research study (Chapter 1).

After achieving clearly stated research questions and hypotheses, the second step involves 'research methodology' (presented in the current chapter) to validate or test the relationships of the hypotheses between the constructs established. This involves a data collection process in the form of a sequential exploratory design, which means that gathering qualitative data in the first phase precedes the collection of quantitative data in the main study.

The final step is then related to 'data analysis' with qualitative and quantitative study findings and analysis (Chapter 4), discussions and future recommendations (Chapter 5).

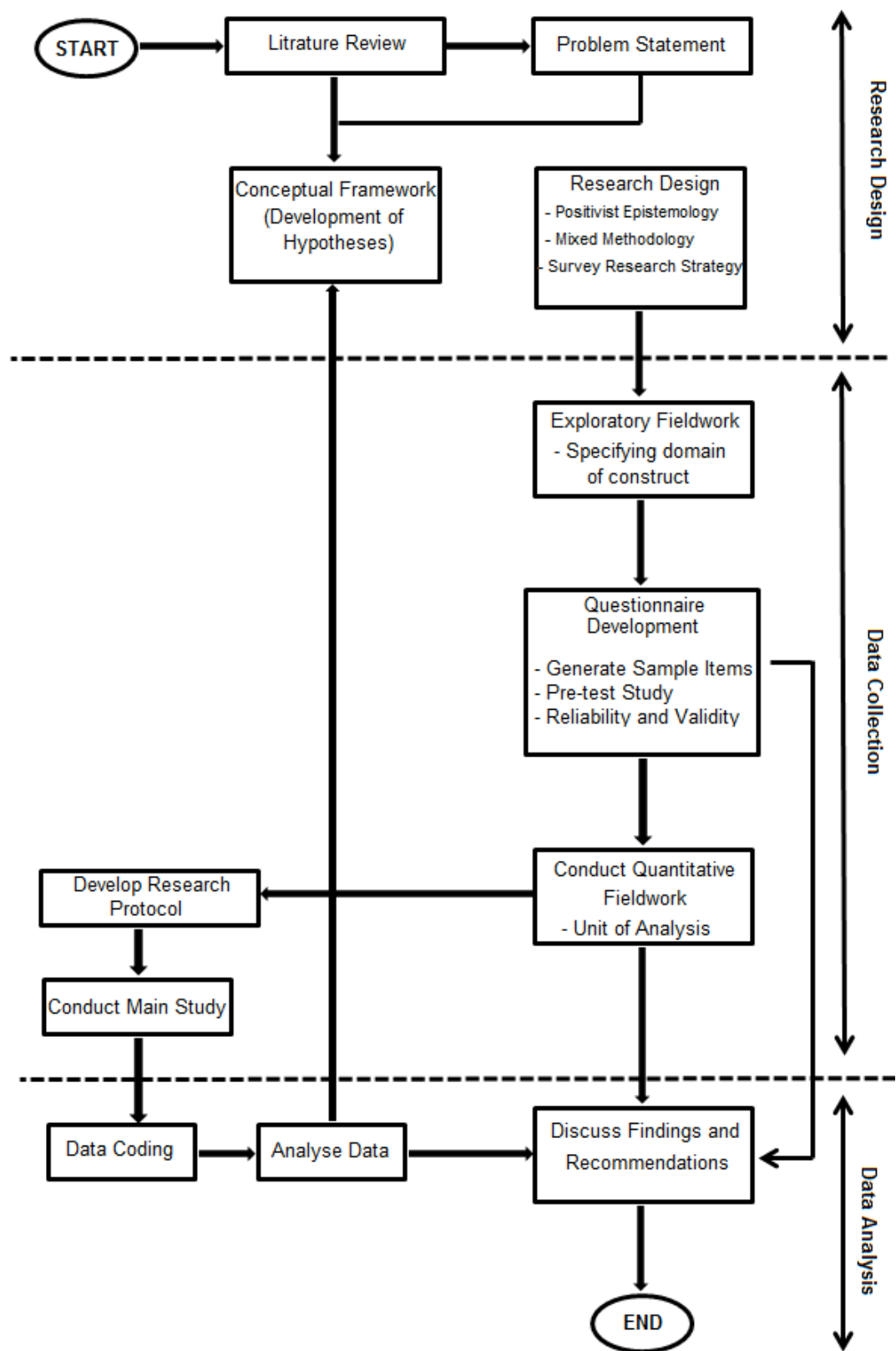


Figure 3.2 Research Design

3-8. Phase 1 Qualitative Research

3-8-1 Reasons for Qualitative Research

To enhance the conceptual framework and increase the validity of this research, the researcher conducted an exploratory qualitative study to inform the main quantitative study. Exploratory research is required when if there is no reliable and quantitative measures of the construct available (Patton, 2002). This is certainly the case of value offering from a customer perspective in the dental sector of Iran where little or almost no empirical study has been done to measure the value offering elements and customer satisfaction from a customer point of view. Based on this rationale, an exploratory phase is considered vital by the researcher for the following reasons:

- Gain a deeper understanding of the research subject especially since value offering from customers' perspective has had little research coverage.
- To assess the relevance of the proposed research questions in a practical environment
- To generate scale items for the development of the survey questionnaire
- To increase the validity of the research findings and obtain a richer explanation of research outcomes.

In summary, conducting an exploratory qualitative research phase gives the researcher a better understanding of the different aspects of value offering and customer satisfaction and the perception of customers about the value offering elements and all these details is very helpful before embarking on the subsequent quantitative phase of the research.

In phase 1, after reviewing the literature and fixing the objectives and conceptual model of the research, the structure and main questions of the interviews were determined based on the main aim of the research. The model suggested by O'Cass and Ngo was chosen as the conceptual model of this study, and it also constituted the basis for constructing the main

interview questions. The interviews constitute the first of two the two stages of the study, and form an exploratory element of the study that was aimed at identifying appropriate themes and vocabulary for the following survey stage. The four main dimensions of the value offering mentioned in the conceptual model are: performance value, price value, relationship building value, and co-creation of value. These four were the major points for the interviews.

3-8-2. Approach

An individual in-depth semi-structural interview approach was chosen. In this type of interview, the issues that the interviewers consider to be most important should be covered and not missed, although topics and questions irrelevant to the main points may also be mentioned (Bryman & Bell, 2011). In-depth interviews are the most powerful instrument for gaining a deep understanding of people's experiences (Kvale, 1983). It is an effective method for exploring in-depth any discussed topics with interviewees and the main aim is to succeed in getting information, reactions, and rich, detailed materials from interviewees for use in the analysis (Lofland, 1995).

One-hour face-to-face in-depth semi-structured interviews were conducted with customers. An individual semi-structured interview gives this ability to the interviewers to have a deep focused dialog with the interviewees. The respondents can give their opinions in any level of details and both the researcher and respondents have more freedom in the conversation (Arora & Stoner, 2009).

While designing questions in semi-structured interviews the researcher should be sensitive to three major points. The first point is whether the respondent understands the question.

The researcher should consider that interviewees might not be as knowledgeable of the subject as him. He, as the researcher, is working on this topic and subject, but should focus on making the questions understandable for others. The second point is whether the respondent is able to answer the question. The researcher is likely to ask a question that cannot be answered by the interviewees because it is the requested information is unknown to the interviewees. The third major point is whether

the respondent is willing to answer the question. They have some scenarios in their mind about the usage of information so we should be careful about any sensitivity related of our interviewees (Lee, 2013). While preparing the interview questions all these points were considered.

3-8-3. Data collection instrument

In this section, the schedule of interviews is discussed, together with how the content of the interviews was developed.

The interviews were designed based on extensive probing and open-ended questions. The interview started with several questions about the experience of using dental implants before starting their work with MTA. The following questions were asked:

- How long have you been using dental implants?
- With how many companies did you have contact before starting your co-operation with MTA?
- Can you tell me anything about your positive experiences in working with the other companies? How about any negative experiences in working with them?
- Why have you decided to buy from MTA Company? What expectation did you have from this company?

This was followed by more questions concerning their purchase experience from MTA:

- How did you find the buying experience from this company?
- Could you please tell me about a positive experience of your purchase from this company? How about any negative ones?
- After that, more detailed questions were asked, especially about the value offering elements of the company:
- How does performance value (e.g. quality, innovative features) affect your decision to buy? How important is it to you? How did you find the company regarding performance value?
- How does pricing value (e.g. fair prices, value prices) affect your decision to buy? How important is it to you? How did you find the company performance regarding pricing value?

- How does relationship-building value (e.g. easy access to the business) affect your decision for buying? How important is it to you? How is the company's relationship-building value?
- How does co-creation of value (e.g. being engaged in the value creation process) affect your decision to buy? How important is it to you? How is the company's co-creation of value?

Finally, questions regarding their overall satisfaction according to the marketing mix were asked:

- How satisfied are you about the company overall? What makes you satisfied or unsatisfied about the company? Products? Prices? Placement? Promotion?
- What main expectations do you have of the company?

In the interviews, I asked about their needs, wants and the things that have made them satisfied or unsatisfied. The highlighted points concerned the main constructs of the study, and the interview focused on the following subjects:

- The priority of value offerings' elements
- The nature of customer satisfaction
- The relationship between value offerings' elements and satisfaction
- Their preferences regarding different constructs' of the research.

3-8-4. Sample

Purposeful sampling was used for the interview stage. Purposeful sampling is a strategy in which specific persons are chosen on purpose to collect information that cannot be gathered in another way (Maxwell, 1996).

Purposeful sampling was selected because it was necessary to obtain rich data from the interviewees regarding their preferences and their desired value. It was necessary to identify closely related customers in dental implants to interview, and that is why purposeful sampling was used.

Both unsatisfied and satisfied customers were deliberately selected for the interviews in order to identify a complete range of customer opinions. In total, 16 customers were selected for the interviews. The company keeps the records of its customers in a computerized database and through the search

in the database eight satisfied and eight unsatisfied customers were selected.

The satisfied customers were selected based on their purchase history and the years of working with the company. These eight satisfied selected customers have been working with the company for more than eight years, and their purchase numbers are very high (i.e. among the top 10 most frequent customers of the company). The unsatisfied customers were those who used to be customers of the company but who have left the company a while ago, and no longer buy products from the firm.

In short, interviews were conducted with 16 customers who are dentists. In these interviews, the dentists were asked about their experiences of working with Mehr Teb Asia Company and the other companies, and specifically about their purchase experience of dental implants. Dental implants constitute a very specialized product and even though the dentists are not the final users of the products, they are the main decision makers in the process of buying: when a patient visits a dental practice, s/he has no idea what a dental implant is and expects the dentist to solve the problem. The dentist then decides which brand or type of implant is suitable for the patient. That is why dentists were chosen as participants rather than patients, for the dentists are the company's customers and products sold directly to them.

3-8-5. Implementation

A call to the selected interviewees was made to arrange a suitable time and place in advance. A brief explanation of the purpose and intention of the interview and the reason they were selected, was given to them. It was told that they could have the interview in the company office or in their own clinic, office, home or somewhere else. Twelve of the customers preferred to have the interview in their clinics or offices and four preferred visit the company to be interviewed.

The aims of the interview were to understand the value offering elements of the theorized model in the context of MTA company, to construct proper scales for the main constructs of the study, and to define dimensions and scale items for the value offering elements of the company.

Therefore, the major points to be addressed in the interviews were defined, and attempts were made to obtain as much detail as possible from the interviewees, while also not missing the main issues. The interviews were carried out as an open dialog between me as a producer and the dentists as the customers, while attempting to avoid transferring the message to the customers that I am in control and they are mere respondents. The aim of the interviews was to create an atmosphere of openness; to make a two-way transmission of information possible.

An interviewer should be a good questioner and listen to interviewees carefully in a way to show his passion and interest to them. The interview should be similar to a guided dialogue. The interviewer should shape the process into a familiar and comfortable form of social involvement (Patton, 1990).

Before attending each session of interviews, I repeatedly practiced the questions and the strategies I intended to use for each interviewee, based on his/her status (satisfied or unsatisfied) and personality. As they have been my customers for many years, I had an understanding of how to treat each of them to make the interview atmosphere pleasant, to encourage them to cooperate. I thus gave myself a generous amount of time to before each interview, to prepare myself in the best possible way.

The critical incident technique was used in the interview. This method is one of the most commonly used ones used in qualitative research, in which respondents are asked to explain critical incidents to give the researcher a clear idea of the situation. In this technique, the data is collected from the respondent's perspective and in their own words, and respondents are not limited to any given framework (Bryman & Bell, 2011). When the dentists were interviewed about their satisfaction and dissatisfaction with their relationship with the company or about the services and products of the company, I tried leading people to share a story of the moments of positive feelings and negative feelings of their purchase experience with the company, or to give more straightforward details of their source of dissatisfaction and satisfaction. To me, it was an extremely useful tool to engage interviewees to talk about their purchase or working experience with Mehr Teb Asia Company. This method persuaded people to be more specific

about their experiences and to give more information about their positive or negative moments. As the success of my business greatly depends on its customers, and the current problem of the company is losing major customers, I tried to use the critical incident technique to identify any customers (satisfied and unsatisfied) who were involved in the process of value creation and offering of the company, and understand the main reasons of their satisfied or unsatisfied status.

At the start of interviews, I introduced myself and gave a little background to the study. Before starting the main questions of the interview I decided to ask several easy questions such as: How was your day? How is the business going? Such questions were meant to break the ice and also to remove any possible stress for the interviewees and myself.

During the interview I tried not to interrupt the interviewees unless I realized the talking was going far away from the main topic of the interview. I was an active listener during the interview, meaning I responded to what they were saying before going to the next question, and I was trying to make a two-way conversation. At the end of the interviews, the interviewee was given the chance to mention any opinions that they liked to share which had not been covered in the interview. After this, they were thanked for their time and expertise.

3-8-6. Data Management

The interviews were conducted in Persian and were recorded and transcribed shortly after. All the interviews were recorded, and all the interviewees agreed to this. Before each interview, the recording equipment was checked to ensure it was working properly and it had the necessary power. I took quick notes immediately after finishing the interviews, to state my thoughts and feelings, and then started to transcribe the interview as soon as possible.

The recording and transcribing gave me the opportunity to concentrate precisely on the interviewees' speech, and to obtain further details by checking the transcription to ensure that no points were missed. The parts of the interview that related to the objectives and main constructs of the

research were selected. Consequently, these useful sentences were translated from Persian into English. For each participant one code was allocated. Since I had two types of customers in this phase (satisfied and unsatisfied), I coded satisfied customers as SAT 1, SAT 2, ... , SAT 8 and unsatisfied customers as UNSAT 1, UNSAT 2 , ... , UNSAT 8. This type of coding allowed me to distinguish the satisfied and unsatisfied transcriptions very easily.

3-8-7. Analysis procedures

The focus of the interview analysis was to justify the scales and dimensions of O'Cass and Ngo's model (2011) and to find more scales for the quantitative part of this study. Thematic analysis was used for analyzing the interviews.

Thematic analysis is a method that it is widely used in qualitative research and it is used to find and analyze themes inside data. Data can be explained in-depth through this method (Braun & Clarke, 2006).

In fact, the questionnaire used by O'Cass and Ngo (2011) was a kind of reference for the data collection part of this study, and one of the aims of the interview was to justify the prepared O'Cass and Ngo survey, in order to design the perfect questionnaire for value offering in the context of the dentistry field. There were therefore several prepared themes about value offerings from the managers' point of view which needed to be modified based on the customers' point of view, and in a new context. Themes in content analysis can be gained based on two approaches, that is, the inductive or deductive approach.

The inductive approach relies mainly on the data in itself, and aims to get to general framework by from detail. It aims to make the codes without the effort of putting the codes into pre-existing model. This approach is labeled as a data-driven one. On the other hand, a deductive approach is a theory-driven one, which uses an available framework or themes that have been identified in previous research, to fit the codes and data into it (Braun & Clarke, 2006). In the current study, the value-offering part of O'Cass and Ngo's model was used as a reference, and brought some themes in the context of value

offering of companies. At the same time, it was tried to explore new dimensions and scales through the interviews, and there was no aim to limit any findings of new scales or themes, and it was important to nice any important information from the interviews. Therefore, this study falls somewhere between theory-driven and data-driven approach, and the coding of the interviews is based on prior research but without any intention for limiting any exploration in the data set.

Another decision that needs to be made when performing a thematic analysis is to decide at which level the themes are to be considered: a semantic or a latent level. At a semantic level, the surface meaning of themes is identified and the level remains at a descriptive level. In contrast, the latent level is something beyond the semantic level and aims to find underlying points goes to the deepest level of meaning; and usually this level involves some interpretations on data and something more than the descriptive level (Braun & Clarke, 2006). Regarding this study, both levels are considered. Based on a pre-existing model of value offering, the thematic analysis on a semantic level is performed and for finding the scales and conceptualization of value offering from a customers' perspective, thematic analysis in a latent level is performed to find any underlying scales and dimensions.

The first step was familiarizing yourself with the data set. Data should be reviewed many times to make the researcher dominant in the field. In this phase, the first codes are made (Braun & Clarke, 2006). For this step, the interviews with dentists were transcribed and the transcripts were read and re-read to become familiar with the date. The initial codes were noted in this step. In the next phase, the initial codes are generated. By reading the transcripts in the first stage of the analysis, I became familiar with the text. As I gained in familiarity and confidence, I started to make the initial codes in this stage, listing them, and trying to find similar codes across transcripts. Since my approach is between theory-driven and data-driven, I considered both approaches while making the initial codes and I based the coding on the pre-existing model while also trying not to miss any new potential codes. In the third stage, I looked for themes. Before starting this stage I had a long list of initial codes from the second stage, which were ready to go into different themes. I ordered codes into 'piles' by cutting my transcript into

chunks, each of which includes one 'code'. Then they were organized into labelled piles, each pile containing a separate reference to the identified code. Then, once I have gone through the entire data I had a large number of 'piles', of varying size (large numbers of references to one theme, small number of references to another) After that, overlapping codes were identified and I put them into single piles, thus reducing my codes and eventually having all codes into 24 piles. These labeled piles became my themes. During this process the more concrete labels may become less concrete and by reducing the overwhelming number of codes to a small number, I was able to build up a picture that resolves my research question. In the next stage, the themes need to be reviewed and checked. They needed to be refined, and at this stage the proposed themes were checked with the concepts of O'Cass and Ngo's model and refined based on the pre-existing model. I checked all of them repeatedly at this stage, to make sure that they were telling the overall story of the data in a very cohesive way. This provided the basis for the final analysis and 24 identified themes are discussed, with illustrative quotations from the interviews used to build up a strong picture of the themes.

3-9 Phase 2 – Quantitative research

The aim of this phase is to understand the relationship between the main constructs of value offerings. The scales of the main constructs are modified by the result of the interviews. After the interviews are conducted in Phase 1, the survey is used in this phase for the collecting of data.

3-9-1. Approach

A self-completed survey was used. The survey was undertaken through a structured questionnaire using the Likert scale. A five-point multiple-choice scale was selected. Closed questions were used in the questionnaire. In a closed question, there is more clarity for respondents, it is easier and more likely to be completed by them, and the closed questions are easier to

analyze or to reveal the relationship between questions (Bryman & Bell, 2011). For all these reasons, the researcher decided to use the closed question format for this part of the study.

Respondents were asked to answer the questions on a Likert scale that was a 5-point scale ranging from strongly disagree to strongly agree. The options for answers were: 1- Strongly disagree 2- Disagree 3- Neutral 4- Agree 5- Strongly agree.

3-9-2. Data collection instrument

The content of the survey came from the qualitative phase of the study and from theory. The design of the survey was kept simple and compact. It covered as few pages as possible to make it simple and quick for the customers to fill in, as it was understood that dentists are very busy and that if there are too many questions and/or these are spread out over too many different pages, it might lead to incomplete questionnaires. The questionnaire focused on the following subjects:

- The relationship between value offering elements and customer satisfaction.
- The perception of customers of value offerings elements of the company
- The total customer perceived value
- The customers' satisfaction

The survey was designed based on the literature and on the interviews. The questionnaire was a modification of the value offerings questionnaire used in study by O' Cass and Ngo in 2011.

This questionnaire was used in a study about the value creation process from the managers' perspectives, and for this current study we needed to analyze the value offerings from the customers' perspective. So the results of the interviews with the satisfied and unsatisfied customers were used to modify this questionnaire from a customers' perspective working in dental implant field. The four dimensions of value offering in the original questionnaire are performance value, price value, relationship building value and co-creation of value, covering 21 scales in total, and all of them are from the managers' perspective.

In the following table the design of the survey is mentioned step by step. In the Table 3-1, the original questions are mentioned and next to them related quotes from the interview are provided. Finally, based on the interview results, the original questions which were from the managers' perspectives were modified to become questions from the customers' point of view.

Table 3-1. Modification of value offerings' indicators			
Constructs	Managers' Perspective	Interviews	Customers' Perspective
Performance value	1-Ensuring customers' personal preferences are satisfied.	UNSAT 3: I personally prefer to use external implants rather than internal ones despite the internals are more popular among my colleagues.	1-The firms' products are in accordance with my personal preferences.
	2- Delivering quality products.	SAT 4: These days, most of the implants in the market have the basic necessary qualities, and when buying them, I will compare the details of the implants produced by different distributors and then decide to choose the highest quality one.	2- The quality of the product provided by this company is higher than the other firms'.
	3- Delivering products that are exactly what customers want.	SAT 2: I think it is important for a company to succeed at understanding what exactly I need and since this field of work is specialized, it is likely to see some misunderstanding between my need and the companies' offers.	3- The firm provides products that are exactly what I want.
	4- Delivering products that exceed customers' expectations.	UNSAT 8: Today, the purchase power of transaction is in customers' hands, and I as a dentist have expectations higher than the basic ones of distributors, and I like to see the products that meet my expectations and even higher.	4- The company provides products that exceed my expectation.
	5- Delivering products with innovative performance features.	SAT 3: The firm should catch up with the most up-to-date technology available. New designs of implants with some unique features are something that I like to see from companies continuously.	5- The firm provides products with innovative features.
	N/A	SAT 6: Sometimes some of the implants are really hard to work with ...like a difficult insertion, or a complicated procedure to tighten them. And even though their quality is good, I prefer not to use them because they are not very usable.	6- The functionality of the product is delivered.
Price value	6- Pricing policies are fair to all customers.	UNSAT 5: We cannot ignore the role of price and when I feel the fairness of prices, it tempts me to buy more from this company.	7- Prices are fair in comparison with the other brand's prices.

	<p>7- Pricing policies are consistent and accurate.</p> <p>8- Pricing policies are more beneficial for customers than our competitors.</p> <p>9- Pricing products according to how valuable customers perceive them to be.</p> <p>10- Delivering quality products which are priced right</p> <p>N/A</p>	<p>UNSAT 7: It really bothers me when companies by the start of new year change their prices because of some excuses like inflation rate or raw material costs. It makes me feel the company is unreliable, for changing the prices in a short period of time.</p> <p>SAT 1: This is my job and I have some basic costs like my clinic rent, my assistants' salaries and so on. So I have to feel some more benefits from this company rather than the others, to persuade me to work with it.</p> <p>UNSAT 1: It does not matter how expensive a product is. Even though I am sensitive to prices, I buy expensive products when I feel they are worth paying for and the value of the price is conveyed to me. Sometimes you are paying for high quality and I understand that to have such high quality, I have to pay more.</p> <p>SAT 7: Giving more options for payment is suitable for me and makes me able to buy more items. If the company trusts me and gives me a chance to pay at a later time, it transfers a good sense from the company to me and I prefer to keep business with such companies.</p>	<p>8-Prices offered by this company are consistent.</p> <p>9- Prices are beneficial for me.</p> <p>10- I feel that the prices offered by the firm are valuable.</p> <p>11- The firm is giving me an affordable payment method.</p>
Relationship building value	<p>11-Ensuring that customers have easy access to the business at any time</p> <p>12- Ensuring rapid response standards to deal with any customer enquiry.</p> <p>13- Having continuing relationship with customers.</p> <p>14- Maintaining long-term relationship with our customers</p> <p>15- Delivering add-on values (special offers, status recognition) to keep customers</p>	<p>SAT 2: There are some urgent moments at which you need help from the company. It is important for me to work with a company available all the time.</p> <p>UNSAT 3: Some companies just think about the selling items and do not care about any post-sale service, and they think that when the transaction is finished, their job is done. But they are totally wrong and I need to get quick support from the company after my purchase.</p> <p>UNSAT 2: I remember many years ago, I was buying the products from a company and I stopped my purchase for a while. But even at that time, they did not cut their relationship with me and they kept making contact with me on different occasions to ensure that I was OK. This kind of manner tempted me to get back to that firm and start my purchases again.</p> <p>SAT 8: Every month I meet different companies' representatives and sometimes some special and extra offers make me to purchase from them.</p>	<p>12- The firm is accessible for me at any time.</p> <p>13- The company responds to my enquiries in the quickest possible time.</p> <p>14- The firm is keeping a continuous relationship with me.</p> <p>15- The firm is looking for having a long-term relationship with me.</p> <p>16- The company regularly offers me some extra services and add-on values.</p>

	N/A	Many times I am buying something from a company because of the way I was treated. It is really important for me to work with someone who realizes my value and position in this field.	17- I am being treated by the firm as an important person.
Co-creation of value	16- Interacts with customers to serve them better 17- Working together with customers to produce offerings that mobilize them 18- Interacting with customers to design offerings that meet their needs. 19- Providing services for and in conjunction with customers. 20- Co-opting customer involvement in providing services for them. 21- Providing customers with supporting systems to help them get more value.	SAT 5: In my opinion, there should be close collaboration and open dialog between the companies and dentists, because this area of work is very specialized, and the knowledge of dentists can help the companies to offer a better service and products that meet our needs. UNSAT 1: When I am engaged in a value process of the company, I feel a kind of commitment to this company and I feel this company is mine and I have had a part in their success. UNSAT 4: Support from the company is lacking sometimes, and many companies think that if they have a good product for a good price, that is it and they don't need to support the customers, but they are totally wrong. UNSAT 6: The basic principal for a co-creation of value is trust, and when there is a reasonable trust between the company and me, I can give my best ideas to the company. But the company should like to hear my voice and if I see their interest in my ideas, I will share them openly.	18- The firm interacts with me to give a better service. 19- The firm is working with me to produce offerings that mobilize me. 20- The firm interacts with me to make offerings that match my needs. 21- The company engages me in process of providing services. 22- The firm provides me with supporting systems to help me get more value. 23- The firm is trustful and I can rely on this firm. 24- The firm is passionate and open to my new ideas.
	N/A		
	N/A		

The survey is made up of 24 scales, that is, three scales more than the original survey. In fact, five new scales were added to the questionnaire, and two scales of the original questionnaire were merged together, in total making 24 scales for this new questionnaire.

Marketing mix is considered as the measurement for customer satisfaction and in the questionnaire developed by O'Cass and Ngo, the marketing mix is from the firms' perspective, as it also is in most of the literature. We instead need to look at the marketing mix from a customers' perspective and modify the questions in the original questionnaire, which are based on a managers' perspective, to a customers' perspective.

Lauterborn (1990) conducted a study in which he looked at the marketing mix from a customers' point of view, and transformed these elements from the managers' perspective to the customers' ones. In fact, the product was converted to a customer solution, meaning about customers' wants and needs. The price was transformed into the cost to the customer, while in the

price is actually only a part of the cost. Placement was converted to convenience to buy, and finally, promotion was transformed to communication. In fact, the world is communication, and all good advertising creates a dialogue. Promotion is from the seller and communication is from buyer (Lauterborn, 1990).

There has been some criticism against the marketing mix that it is not customers oriented, i.e. that it is mainly related to the managers' perspective and that the role of the customer is passive (Moller, 2006). Based on a study conducted by Lauterborn (1990) the marketing mix section of the questionnaire was modified to a customers' perspective.

Table 3-2. Modification of customer satisfaction indicators		
Construct	Managers' perspective in original questionnaire (O'Cass & Ngo, 2011)	Customers' perspective in modified questionnaire
Customer satisfaction	1-Satisfying customers via products.	1- I am satisfied about the quality of products offered by the firm.
	2- Satisfying customers via pricing strategy.	2- I am satisfied about the cost that I pay for having the products.
	3- Satisfying customers' distribution channel strategy.	3- I am satisfied about the convenience to buy made by the firm.
	4- Satisfying customers via marketing communication strategy.	4- I am satisfied about the way that I am communicated by the firm.

In the final section of the questionnaire, there are five questions about customer retention, and in two questions customers are asked about the duration of their purchase from the company. They are also asked about their sales numbers annually. In the remaining three questions, customers were asked whether they recommend this company to their colleagues and whether they would buy again from the company. Finally, they were asked whether they have a feeling of commitment to the company.

Based on the main constructs and the conceptual model of the study, customer retention is not included in this study, but this section is placed in the questionnaire for the possible papers published in the future.

3-9-3 Pre-testing

Pre-testing allows the testing of most aspects of the questionnaire with respect to time taken, ease of completion and ease of data collection. It is common practice to perform a pre-test on newly developed instruments. This enhances validity and provides an opportunity to fine-tune questions. Attention to language of any questionnaire is important in order to avoid bias and ensure accuracy of response (Ticehurst and Veal, 2000, p.151).

The questionnaire was pre-tested on face validity by six dentists experienced with using dental implants. Face validity confirms whether the measure reflects the content of the concept in question (Bryman & Bell, 2005). These dentists were asked to state their point of view about the clearness of the questions and the scale items, the format and the time to complete the questionnaire. Based on the feedback, some adjustments were applied to different parts of questionnaire to make it more appropriate.

Using pre-test with these six experienced dentists seems enough because these chosen dentists were all very experienced and expert in this field, they were reputable dentists whose ideas and comments are widely respected, they were opinion leaders in Iran. Also, the questionnaire used in this study is the modified version of validated questionnaire used in another study and the aim of this pre-test was to ensure the questionnaire was suitable for the context of Iran.

3-9-4. Sample

The questionnaires were distributed among 300 dentists who are the customers of the company and all of them are implantologist which means they are dentists with extensive training in and knowledge of the art and science of dental implants. The company is working with around 500 dentists and it was decided to have the survey distributed among 60% of the population – hence, 300 dentists were selected.

They were chosen randomly and there was no intention to have the same number of satisfied and unsatisfied customers like we had in the interviews,

so random sampling was used. Similar to the interviews, dentists are chosen as the sample of this phase of study rather than patients, because dental implants are a very specialized product and the features of this product are not recognizable by an average patient; moreover, the dentist is the person to decide what type or brand of implant is suitable for a patient. The company keeps the record of the customers in a computerized database and 300 dentists were chosen from this database. Finally, 268 questionnaires were completed and returned by the customers.

3-9-5. Implementation

The questionnaires were distributed among the dentists by company courier service. All addresses of the selected dentists were available in the company database and the company has a private courier service. All questionnaires were handed by a courier to each of dentists individually, at which point they were asked to read the instruction that accompanied the survey and to try to fill it in at their earliest convenient time.

The questionnaire was completed anonymously and no name of the person or clinic is stated on the questionnaires. At the end of the questionnaire, the instruction of returning after completion was explained. They had two options: either as post it to the mentioned company address or calling the company's phone number to hand the questionnaire to the company's courier.

3-9-6. Data Management

The survey is a self-completed one and SPSS is used for the analysis. First, SPSS version 22 was installed on the laptop and this software was piloted and checked thoroughly. After having received the completed questionnaires, they were checked for completeness. After that, the questionnaires were numbered and each of them was appointed a unique number in order to make them identifiable and make the process of data entering into SPSS more straightforward. Necessary variables were then set up in SPSS, and the content of each questionnaire was entered into the SPSS file. The

entered data was checked several times and any invalid values or missing data was corrected.

3-9-7. Analyses

Statistical Package for Social Sciences (SPSS) version 22.0 was used for analyzing the quantitative data. First, through an exploratory factor analysis, the major dimensions were explored. After this, the results of the factor analysis were compared with the dimensions mentioned in O'Cass and Ngo's model, and for each factor the reliability was checked. When coming across any factors with low reliability, these were removed. The remaining factors were used as the variables in a regression analysis. In the following section, the factor analysis is further explained.

3-9-7-1. Analysis Procedures

To test the validity and reliability of the items that comprised the value themes, factor analysis was used. This led to the computation of compound variables as a measure of each type of value. These compound variables were used as the independent variables in regression analysis with customer satisfaction as the dependent variable. Following this, each factor was examined in detail and customer satisfaction was regressed onto the individual items associated with each value theme.

Actually in factor analysis, each type of value is considered as a factor and each factor is defined by the variables that load on it and each factor is labeled based on its content of variables. So different variables are loaded on different type of value and make these factors measurable.

In fact, there are some techniques for analyzing data by which the researcher can identify the clustering of variables. The most famous one is factor analysis. Factor analysis is widely used in different fields including business and management, especially when exploring the variables that cannot be measured directly and are underlying. Factor analysis allows the identification of hidden variables in our data set. We can categorize the main usages of factor analysis in three different categories:

- For understanding the structure of a set of variables;
- For constructing a questionnaire to measure underlying variables;
- For reducing a large set of data (Field, 2013).

Malhotra (2007) explains: “Factor analysis is a class of procedures primarily used for data reduction and summarization” (p. 609). In most of the marketing research, there are many variables which are correlated to each other and which should be reduced to a manageable number. Factors analysis is the response to this requirement (Malhotra, 2007).

Through factor analysis, we can explore what people think exactly, even if they do not know they think about it. The main two approaches of factor analysis are exploratory and confirmatory. In an exploratory approach, the researcher intends to explore the basic structure of a big range of variables, with the initial assumption that each variable can have relationship with any other variables. In other words, in this approach there is no initial hypothesis about the variables. However, in a confirmatory approach, the researcher has got some predefined assumption or hypothesis about the ways the variables are related to each other.

In this approach, the number of factors is fixed and set by the researcher and he/she already knows how many factors or main dimensions there are in the study. Factor analysis provides the tools for analyzing the structure of interrelationships (correlations) among large number of variables, in this case a questionnaire response, by defining sets of variables that are highly interrelated, known as factors (Hair, *et al.*, 2013). The justification of using factor analysis is that the independent variables are made up of continuous observed variables, while the dependent variable of interest is made up of continuous latent variables. By reducing a dataset from a group of interrelated variables to a smaller set of factors, factor analysis achieves parsimony by explaining the maximum amount of common variance in a correlation matrix using the smallest number of exploratory constructs (Field, 2009).

Different techniques, such as exploratory or confirmatory factor analysis, can be used to achieve this purpose. Both are useful in searching for structure among a set of variables or as a data reduction method. However, exploratory factor analysis (EFA) techniques “take what the data give you”

and do not set any a priori constraints on the estimation of components or the number of components to be extracted. There are different methods to run an exploratory factor analysis and among all of them, the principal component analysis is the most preferred one. This one is used in most of the exploratory factor analysis. This method consists of analyzing the total variance and showing how a particular variable contributes to a factor. It tries to explain the maximum amount of variance by the minimum number of hidden factors (Field, 2013).

Before starting the factor analysis, we should assure that we can use the data for this analysis. In order to do that, we need to look at two issues. Sample size and strength of correlation between variables are the two main points that tell us whether factor analysis is doable (Field, 2013).

Factor analysis and its reliability heavily reliant on sample size. There are different opinions about the proper sample size, but a very common one is to have at least 10-15 participants per variable. Many other authors believe that the number within the variable does not matter and that the overall sample size matters.

Tabachnick and Fidell (2012) advise to be on the safe side, i.e. that it is better to have a sample size containing at least 300 cases. Some other authors such as Comrey and Lee (1992) are suggesting that if the sample size is 300, we can consider it as good. If it is 100, it is poor and if we have a sample size of 1000, it is an excellent sample size.

Apart from sample size, the correlation between variables is important. We should make sure that the data matrix has enough correlation. A very common test for this question is Bartlett's test. It assesses the entire correlation matrix. If the variables in a correlation matrix do not correlate at all, we will have an identity matrix (a square matrix in which the diagonal elements are equal to 1, and off diagonal elements are equal to 0) as our correlation matrix, and it means that every variable correlates poorly with other variables. In fact, Bartlett's test is telling us whether our correlation matrix is significantly different from an identity matrix. So it is better to see it significant, as it tells us that correlations between variables are different from zero (Field, 2013).

After passing the above steps the researcher can be sure about applying factor analysis. There are several methods for conducting a factor analysis and as mentioned earlier, the most common one is principal component analysis. This approach will be used in this study.

After having decided on the method, it is time to extract the initial factors. This step is very helpful for reducing the data. In this step, the main factors are identified after which all variables can be placed in a factor. The researcher fixes the number of factors in order to ease the process of identifying the underlying relationship among the variables. The process of deciding how many factors to keep is referred to as extraction. For deciding on the number of factors, there are several techniques.

A very common method is Kaiser's criterion. Field (2013) explains: "A method of extraction in factor analysis based on the idea of retaining factors with associated eigenvalues greater than 1.

The researchers usually pay attention to eigenvalue as a guideline while deciding the number of retained factors, especially in their initial interpretations. Besides, this decision depends why you are doing the analysis, and based on this point the researcher makes the final decision about the exact numbers of factors (Field, 2013).

After the number of factors has been set, it is time to start the final step, which is the interpretation. There is a factor that makes the interpretation stage a bit difficult. There are many variables with high loading on the most important factor and with a very small loading on the other factors.

For solving this issue, there is a technique called factor rotation. Field (2013) defines rotation as "a process in factor analysis for improving the interpretability of factors. In essence, an attempt is made to transform the factors that emerge from the analysis in such a way as to maximize factor loadings that are already large, and minimize factor loading that are already small" (Field, 2013).

On the other hand, confirmatory factor analysis (CFA) technique involves grouping variables together in a factor (Hair. *et al.*, 2013). The purpose of EFA is to explore the data and provide information to the researcher about the number of possible factors that best represent the data, whereas the purpose of the CFA is to validate or confirm the measurement factors that

exist within a set of variables involved in the theoretical model (Hair, *et al.*, 2013).

The CFA is often performed through structural equation modeling. For the purpose of this research study, an initial exploratory factor analysis was employed to take data in a group for a factor and then apply confirmatory factor analysis techniques for the same dataset to confirm the group of measurement variables related to a factor for examining the hypotheses.

3-10. Ethical approval procedure

Ethical approval was necessary for this study since it involved the collection of primary data from human participants. The application form for ethical procedure was filled in and sent to research ethics committee. After two weeks, the ethic panel responded that the chair of the research ethics panel had reviewed my ethics checklist and he had requested some clarification in relation to this study.

They mentioned that there is a potential impact from my role of supplier on the data that I collect because I was interviewing customers of my firm. This may impact on the things that people feel they are able to tell me. They asked me to provide necessary information regarding this issue. After one week I answered to them that I am very aware that, as a supplier, I could potentially have an effect on the way participants respond in an interview and there are a number points that are important, namely:

- The interviews are the first of two stages of the research, they are an exploratory element of the research that will identify themes and vocabulary for the following survey stage. This survey stage will not involve face-to-face contact and it so will be anonymous. It is this survey stage that will quantify responses to the issues identified in the qualitative phase.
- The interviews will be framed as identifying their general views and specific attitudes to the service in order to improve service. Interviewees will be told that their views, positive and negative, are equally sought. I will emphasize that the more insight they can give into both weaknesses and strengths, the more the service can be tailored to their needs.
- Interviewees will also be told that their opinions are sought on the product

itself, to be fed back to the manufacturer. Hence, the interviews concern the whole supply chain, not only my company as an intermediary.

- The Company is concerned with high value, high involvement products and service. This means that relationships are important, and I work closely with my supplier and direct customers to provide the best products and services.

- Included in the sample will be customers who have complained about the product/service and so are not entirely satisfied. These customers are clearly not shy in making their views known, and should give valuable insights.

- All interviewees will be assured of anonymity in the reporting of outcomes.

- I will make judgment on the veracity of the responses that are forthcoming, constantly aware of the possibility of influence.

- In general, qualitative research can be subject to interviewer influence, this is something that is addressed in the research methods training that is a part of the preparation for fieldwork.

- As a DBA research project, mine is like many others that involve working with the candidate's stakeholders, often customers, with the inherent challenges that this presents.

- Many of the interviewees will not be known to me personally, their involvement with the company will have been through the sales office. In this sense, there will be something of a distance from their everyday interaction with the firm that will give them a sense of confidence in being honest.

The ethic panel responded in the week after and they informed me that they are pleased to let me know that the chair had confirmed approval of this study, with no further ethical security required.

They only asked me to add a sentence onto any material I share with participants confirming that ethics approval had been granted by the chair of the humanities, social and health sciences research ethics panel at the university of Bradford on 9th March 2015.

3-11. Summary

This chapter covered an overview of the research approach and the strategies used to address the research problem, and by how the research objectives were stated. The context of the research and the data collection procedure as well as analysis strategies were discussed in this chapter. Since the study is carried out in two phases, the approach, data collection instrument, samples, implementation, data management and analysis were explained in detail for each phase separately.

A detailed explanation about the characteristics of factor analysis was given. Different philosophical paradigms were discussed and the chosen paradigm for this study was explained in detail. Besides, since this study involves human participants, the ethical approval from the Bradford university research committee was necessary, and the process of gaining this permission was explained in detail. In the next chapter, the results of the collected data in both phases of this study will be reported.

Chapter 4 – Result

4-1. Introduction

In this chapter the results of both the qualitative and quantitative phases of the study are reported according to their contribution to the objectives of the study. The main research objectives and questions are discussed. Also, the results from the interviews and surveys are discussed (for each objective and research question in separate sections). More specifically, the outcomes of the thematic analysis of the interview data from 16 interviews with satisfied and unsatisfied customers are discussed, and additionally, the results from the survey (n=268) are reported.

First of all, the descriptive statistics of the types of value offerings presented to actually demonstrate how the company is performing on each construct and also items.

This chapter reveal which elements of value offerings are the most important ones in terms of their relationship with satisfaction, and also all results related to value offerings' elements are presented in order of their importance and they are reported in all sections of this chapter based on this principal.

In this chapter, factor analysis results are presented in confirmation of the validity of the different factors embedded in value offering. The measurement model was specified using the interrelationships between indicator (observed) and latent (unobserved) factors. For this measurement model, CFA was performed using SEM software AMOS 22. Then, the structural model related to the dependent and independent variable was related in order to test the hypotheses.

Later, the pertinent excerpts from the interviews are reported in the context of the main themes of the study and to underpin and illuminate the nature of the constructs and sub-constructs of the main foci of the study – value types.

4-2. Objective 1: to understand the relative importance/priority of value offering elements.

Objective 3: to identify the relationship between the value offering elements and customer satisfaction

4-2-1. Descriptive statistics

The following table shows the statistics of different constructs of value offering.

Table 4-1 value offering constructs											
Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Mean	SD
n	%	n	%	n	%	n	%	n	%		
Price value											
43	16	46	17.1	67	25	78	29.1	34	12.6	3.32	1.149
Relationship building value											
19	7.08	60	22.38	74	27.61	82	30.59	33	12.31	3.20	1.185
Performance value											
19	7.08	51	19.02	76	28.35	70	26.11	52	19.4	3.10	1.203
Co-creation value											
30	16	59	20.1	63	24.6	87	26.1	29	13.1	3.05	1.278

units: 1= Strongly disagree, 5= Strongly agree

As can be seen in the Table, the construct “Price value” has the highest mean (M = 3.32) and the construct “co-creation” has the lowest mean (M = 3.05).

In addition to that, the item “co-creation value” has the highest standard deviation (SD = 1.278) which means the data points are spread out over a wider range of values.

In the following sections of this chapter, the statistics of value offering elements are mentioned. It helps to understand the relative importance of value offering elements better.

The following table shows the performance of the elements of the price value factor.

Table 4-2 Price value

Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Mean	SD
n	%	n	%	n	%	n	%	n	%		
The firm is giving me an affordable payment method.											
47	17.5	39	14.6	57	21.3	83	31	42	15.7	3.13	1.332
Prices offered by this company are consistent.											
37	13.8	44	16.4	69	25.7	87	32.5	31	11.6	3.12	1.223
Prices are fair in comparison with the other brand's prices.											
43	16	50	18.7	70	26.1	71	26.5	33	12.3	3.03	1.314
Prices are beneficial for me.											
43	16	54	20.1	66	24.6	70	26.1	35	13.1	3.00	1.278
I feel that the prices offered by the firm are valuable.											
45	16.8	46	17.2	68	25.4	81	30.2	28	10.4	3.00	1.253

N=268 units: 1= Strongly disagree, 5= Strongly agree

As can be seen in the Table, the item “The firm is giving me an affordable payment method” has the highest mean ($M = 3.13$) and the both items “I feel that the prices offered by the firm are valuable” and “Prices are beneficial for me” have the lowest mean ($M = 3.0$). Besides, the item “The firm is giving me an affordable payment method” ($n = 47$, 17.5 %) has the highest number of the option “Strongly disagree”.

On the other hand, surprisingly, the highest number of the option “Strongly agree” goes to the same item ($n = 42$, 15.7 %). In addition to that, the item “The firm is giving me an affordable payment method” has the highest standard deviation ($SD = 1.332$) which means the data points are spread out over a wider range of values. The following table illustrates the frequencies of the relationship building value factor

Table 4-3 Relationship building value

Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Mean	SD
n	%	n	%	n	%	n	%	n	%		
All the time the company responds my enquiries in the quickest possible time.											
20	7.5	56	20.9	81	30.2	71	26.5	38	14.2	3.24	1.249
The firm is accessible for me at any time.											
12	4.5	62	23.1	76	28.4	87	32.5	31	11.6	3.24	1.071
I am being treated by the firm as an important person											
21	7.8	60	22.4	61	22.8	89	33.2	37	13.8	3.23	1.173
The firm is looking for having a long-term relationship with me											
20	7.5	65	24.3	63	23.5	83	31	37	13.8	3.19	1.171
The company regularly offers me some extra services and add-on values.											
15	5.6	59	22	82	30.6	86	32.1	26	9.7	3.18	1.060
The firm is keeping a continuous relationship with me.											
23	8.6	59	22	81	30.2	77	28.7	27	10.1	3.12	1.174

N=268 units: 1= Strongly disagree, 5= Strongly agree

As the data in the Table shows, the item “All the time the company responds my enquiries in the quickest possible time” has the highest mean (M = 3.24) and the item “The firm is keeping a continues relationship with me” has the lowest mean (M = 3.12). Besides, the item “The firm is keeping continues relationship with me” (n = 23, 8.6 %) has the highest number of the option “Strongly disagree”. On the other hand, the highest number of the option “Strongly agree” goes to the item “All the time the company responds my enquiries in the quickest possible time” (n = 38, 14.2 %). In addition to that, the item “All the time the company responds my enquiries in the quickest possible time” has the highest standard deviation (SD = 1.249).

The following table displays the frequencies of the performance value factor.

Table 4-4 Performance value

Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Mean	SD
n	%	n	%	n	%	n	%	n	%		
The functionality of the product is delivered											
18	6.7	46	17.2	65	24.3	80	29.9	58	21.6	3.45	1.243
The firms' products are in accordance with my personal preferences.											
12	4.5	52	19.4	87	32.5	65	24.3	52	19.4	3.35	1.130
The quality of the product provided by this company is higher than the other firms.											
14	5.2	49	18.3	86	32.1	77	28.7	42	15.7	3.31	1.101
The company provides me products that exceed my expectation											
24	9	43	16	78	29.1	74	27.6	49	18.3	3.30	1.200
The firm provides products with innovative features.											
22	8.2	61	22.8	66	24.6	63	23.5	55	20.5	3.28	1.295
The firm provides products that are exactly what I want.											
26	9.7	52	19.4	73	27.2	63	23.5	54	20.1	3.25	1.252

N=268 units: 1= Strongly disagree, 5= Strongly agree

The Table reveals that the item “The functionality of the product is delivered” has the highest mean (M = 3.45) and the item “The firm provides products that are exactly what I want” has the lowest mean (M = 3.25). Besides, the item “The firm provides products that are exactly what I want” (n = 26, 9.7 %) has the highest number of the option “Strongly disagree”.

On the other hand, the highest number of the option “Strongly agree” is for the sentence “The functionality of the product is delivered” (n = 58, 21.6 %).

In addition to that, the item “The firm provides products with innovative features” has the highest standard deviation (SD = 1.295). The following table shows the frequencies of the elements of these “Co-creation of value” variables.

Table 4-5 Co-creation of value

Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Mean	SD
n	%	n	%	n	%	n	%	n	%		
The firm is passionate and open to my new ideas.											
26	9.7	61	22.8	58	21.6	87	32.5	35	13.1	3.19	1.252
The firm interacts with me to give a better service											
26	9.7	54	20.1	70	26.1	87	32.5	31	11.6	3.16	1.165
The firm is working with me to produce offerings that mobilize me											
23	8.6	64	23.9	68	25.4	90	33.6	22	8.2	3.11	1.172
The firm provides me with supporting systems to help me get more value.											
38	14.2	57	21.3	53	19.8	90	33.6	28	10.4	3.09	1.342
The firm is trustful and I can rely on this firm.											
27	10.1	68	25.4	57	21.3	86	32.1	30	11.2	3.09	1.193
The company engages me in process of providing services.											
31	11.6	58	21.6	65	24.3	87	32.5	27	10.1	3.08	1.186
The firm interacts with me to make offerings that are match with my needs.											
42	15.7	49	18.3	67	25	80	29.9	30	11.2	3.03	1.249

N=268 units: 1= Strongly disagree, 5= Strongly agree

The statistics in the Table indicate that, the item “The firm is passionate and open to my new ideas” has the highest mean (M = 3.19) and the item “The firm interacts with me to make offerings that are match with my needs” has the lowest mean (M = 3.03).

Besides, the item “The firm interacts with me to make offerings that match my needs” (n = 42, 15.7 %) has the highest number of the option “Strongly disagree”.

On the other hand, the highest number of the option “Strongly agree” goes to the sentence “The firm is passionate and open to my new ideas” (n = 35, 13.1 %). In addition to that, the item “The firm provides me with supporting systems to help me get more value” has the highest standard deviation (SD = 1.342).

Totally, if we look at all scales of all elements of value offering we can find that the item “The functionality of the product is delivered” has the highest mean (M = 3.45) among all factors and also the items “I feel that the prices offered by the firm are valuable” and “Prices are beneficial for me” have the lowest mean (M = 3.0) among all items of all elements of value offering. Besides, the item “The firm is giving me an affordable payment method” (n = 47, 17.5 %) has the highest number of the option “Strongly disagree” in total. On the other hand, the item the highest number of the option “Strongly agree” is for the sentence “The functionality of the product is delivered” (n = 58, 21.6 %).

In addition to that, the item “The firm provides me with supporting systems to help me get more value” has the highest standard deviation (SD = 1.342) among all other scales.

4-2-2. Exploratory factor analysis

Exploratory factor analysis was performed to provide information about how many factors best represent the data. It was run to identify what the data input can provide the researcher for further analysis. It is used at an early stage of the research and gives information about the interdependence and linkage among a set of variables. It is also used to examine the structure of the measurement items corresponding to the variables presented in the conceptual framework.

In the first objective, the priority of value offering elements from the customers' point of view is revealed. The most / least important elements to the customer are analysed which will help the company to focus its efforts on satisfaction amongst customers. In this first objective of the study, the aim is to understand which elements of value offering are the most and least important.

The results presented below are related to this first objective. To develop the scale items, the dimensions from the theorized model (performance value, price value, relationship-building value and co-creation of value) were adjusted based on the results from the qualitative phase of this study (the development of the data collection instruments is described in detail the methods chapter).

The dimensions identified in the literature were kept, though some items were added or contextualized: several additional scales were added to some dimensions and some scales were merged. This led to 24 final items in total covering the four main dimensions.

The data concerning the variables representing these four value dimensions were analyzed to establish their validity through a factor analysis. The factors were extracted with principal component analysis (PCA) followed by a Varimax rotation with Kaiser Normalization. The 24 variables were analyzed through the PCA to identify factors.

A Kaiser-Meier-Olkin Measure (KMO) was used to test the sampling adequacy. The KMO is .853, which is higher than the minimum sampling adequacy (MSA). MSA above .5 is acceptable.

A Bartlett test was ran to check the Sphericity. The Bartlett test of Sphericity gives degree of freedom and significance. The significance was $\text{sig} < .001$ with $\text{df} = 276$.

These results confirmed that the condition for running a factor analysis was met. The factor analysis was performed. The four-factor structure, reliability of the factors and variance explained by the structure are displayed in table 4-6.

Table 4-6 Value offering constructs					
Factors and variables		(communality)		Factor loadings	
Factor 1 Co-creation of value $\alpha = .883$		1	2	3	4
The firm interacts with me to make offerings that match my needs.	(.707)	.835			
The firm interacts with me to give a better service	(.658)	.788			
The company engages me in process of providing services.	(.595)	.755			
The firm is working with me to produce offerings that mobilize me.	(.568)	.735			
The firm provides me with supporting systems to help me get more value.	(.545)	.720			
The firm is trustful and I can rely on this firm	(.566)	.709			
The firm is passionate and open to my new ideas.	(.527)	.693			
Factor 2 Relationship building value $\alpha = .852$					
All the time the company responds my enquiries in the quickest possible time	(.681)		.819		
The firm is accessible for me at any time.	(.619)		.778		
The company regularly offers me some extra services and add-on values.	(.618)		.767		
The firm is looking for having a long-term relationship with me.	(.619)		.766		
I am being treated by the firm as an important person.	(.498)		.665		
The firm is keeping a continuous relationship with me.	(.503)		.628		
Factor 3 Performance value $\alpha = .848$					
The firm provides products that are exactly what I want.	(.681)			.816	
The firm provides products with innovative features.	(.567)			.750	
The company provides me products that exceed my expectation.	(.604)			.748	
The quality of the product provided by this company is higher than the other firms	(.587)			.720	
The functionality of the product is delivered.	(.526)			.706	
The firms' products are in accordance with my personal preferences.	(.532)			.696	
Factor 4 Price value $\alpha = .864$					
I feel that the prices offered by the firm are valuable.	(.725)				.844
Prices offered by this company are consistent.	(.666)				.811
Prices are beneficial for me.	(.664)				.808
Prices are fair in comparison with the other brand's prices.	(.649)				.788
The firm is giving me an affordable payment method.	(.552)				.725
Eigenvalues		5.954	3.735	2.480	2.290
% of variance explained		24.8	15.5	10.3	9.5
Cumulative %		24.8	40.3	50.7	60.2

The four factors are holding in the sense that the eigenvalues are all > 1 and range from 5.954 to 2.290. The factors explain 60.2 % of the variance with individual values between 24.8 and 9.5. The loading of the individual variables on the factors ranges from .844 to .628.

The internal consistency of the factors ranges from .883 to .848, which are acceptable numbers. The communalities of the variables range from .725 to .498. As mentioned in the table, the four main dimensions of the theorized model of the study are kept after the factor analysis, and all the scales related to these 4 main factors are kept because of their factor loading statistics. This factor analysis confirmed the validity of the factors.

4-2-3 Assessment of validity

Construct validity is examined by assessing the convergent validity, discriminant validity. Convergent validity is the extent to which observed variables of a particular construct share a high portion of the variance in common (Hair, *et al.*, 2013).

Factor loadings of construct and average variance extracted (AVE) estimations are used to assess the convergent validity of each of the constructs (Hair, *et al.* 2013) further suggested that the ideal standardized loading estimates should be 0.7 or higher, but noted factor loading with score of 0.50 and greater as very significant.

The AVE estimation should be greater than 0.5 to show adequate convergent validity. All loadings were greater than .70 (Perceived performance value = .739, Perceived price value= .795, Perceived relationship building value, .737, Perceived co-creation of value= .747) and considered to be significant; thus, convergent validity was established, as Dunn, *et al.* (1994) suggested that *if the factor loadings are statistically significant, then convergent validity exists*. The average variance extracted is shown in Table 4.7 and shows that the AVE estimation is greater than 0.5. Thus, the results demonstrate a high level of convergent validity of the latent construct used in the model.

	Perceived Performance value	Perceived price value	Perceived relationship building value	Perceived co-creation of value
Perceived Performance value	.546			
Perceived price value	.589	.632		
Perceived relationship building value	.544	.587	.543	
Perceived co-creation of value	.552	.595	.550	.558

Table 4.7: Average Variance Extracted (AVE)

Note: Diagonal values are average variance extracted (AVE) and off diagonal are squared inter-construct (SIC) correlations

In addition, discriminant validity was assessed by the average variance extracted (AVE) for each construct compared with the corresponding squared inter-construct correlations (SIC) which is reported in Table 4.7. From Table 4.6, the results indicate that the AVE estimates are greater than the SIC estimates and demonstrate a high level of discriminant validity. Table 4.8 shows the inter-correlations of the construct.

	Perceived Performance value	Perceived price value	Perceived relationship building value	Perceived co-creation of value
Perceived Performance value	1			
Perceived price value	.01	1		
Perceived relationship building value	.19	.29	1	
Perceived co-creation of value	.38	.07	.32	1

Table 4.8: Inter-construct correlations

The result confirmed that all the factor loadings are higher than 0.5, which indicates moderate to strong loadings, these factors are used as the basis for the confirmatory factor analysis (CFA), confirmatory factor analysis is part of structural equation modeling (SEM) approach which reported in the next section.

4-2-4 Structural equation modeling

SEM is: *a multivariate technique combining aspects of factor analysis and multiple regression that enables the researcher to simultaneously examine a series of interrelated dependence relationships among the measured variables and latent constructs as well as between several latent constructs.* It is developed by two components, the measurement model (known as confirmatory factor analysis) and the structural model, which aim to find overall model fit so as to confirm the consistency of a theoretical model and estimated model (Hair, et al., 2013).

Firstly, the measurement model was specified using the interrelationships between indicator (observed) and latent (unobserved) factors. For this measurement model, CFA was performed using SEM software AMOS 22. Secondly, the structural model related to the dependent and independent variable was related in order to test the hypotheses. There are different methods to test the overall model fit; however, no one method can provide an absolute assurance of model fit. According to Hair et. al (2013, p. 578), fit indices can be categorized into three groups: absolute fit, incremental fit and parsimony fit indices. Absolute fit indices are a direct measure of how well the model specified by the researcher reproduces the observed data.

The most common absolute fit indices used are chi-square (χ^2), Goodness of Fit Index (GFI) and Root Mean Square Error Approximation (RMSEA). Chi-square (χ^2) is the most common fit test index in SEM. It is a statistical measure of difference used to compare the observed and estimated covariance matrices, and the only measure that has a direct statistical test as to its significance (Hair, et al., 2013, p. 578). A lower value of chi-square (χ^2) shows a better fit between an estimated model and the observed data. However, χ^2 is not a recommendable fit index in many situations in practice because it is affected sample size, model size, and distribution of variables (Tanaka, 1993). This means, the larger the sample size and the more variables are in the model and the less the sample data shows multivariate normality, the higher is the -value and the more likely the model is rejected. Goodness of Fit Index (GFI) is a measure indicating how well a specified model reproduces the observed covariance matrix among the indicator variables (Hair, et al., 2013, p. 579). The possible range of GFI values is 0 to 1, with higher values indicating better fit. GFI values of greater than 0.90 are typically considered good. Recent development of other fit indices has led to a decline in usage.

One of the most widely used measures that attempts to correct the tendency of the χ^2 Goodness-of-Fit test statistic to reject models with a large sample or a large number of observed variables, is the Root Mean Square Error Approximation (RMSEA). Thus, it better represents how well a model fits a population, not just a sample used for estimation. The RMSEA adjusts the -

value by taking into account the degrees of freedom and the sample size. Lower RMSEA values (between 0.03 and 0.08) indicate better fit (Hair, et al., 2013).

On the other hand, the most commonly used incremental fit indices are normed fit indices (NFI) and comparative fit indices (CFI). NFI is the ratio of the difference in the χ^2 value for the fitted model and a null model divided by the χ^2 value for the null model. It ranges between 0 and 1, and a model with perfect fit would produce an NFI of 1.

Besides, *CFI is an improved version of NFI with a range of between 0 and 1, with higher values indicating better fit. CFI values above 0.90 are usually associated with a model that fits well* (Hair, et al., 2013, p. 580).

The final category is the parsimony fit indices, in which the most commonly used is the Adjusted Goodness of Fit Index (AGFI). AGFI is an extended version of GFI which is adjusted by the ratio between the degree of freedom for the proposed model and the degree of freedom available. AGFI values are typically lower than GFI values in proportion to model complexity. Values of 0.90 or above are considered to be a good fit and those ranging from 0.80 to 0.89 are considered to be reasonable fit. *AGFI is less frequently used in favor of the other indices which are not as affected by sample size and model complexity* (Hair, et al., 2013, p. 581).

It is suggested that if you want to find a good model fit, different fit indices should be used to evaluate the model's goodness of fit and it is highly advised that among all different fit indices, one absolute fit index and also one incremental fit index should be used. (Hair, et al., 2013). *Bearing in mind that there is no single magic value for the fit indices separates good from poor models and it is not practical to apply a single set of cutoff rules to all measurement models* (Hair, et al., 2013, p 589).

4-2-5 Confirmatory factor analysis and measurement models

Following on from exploratory factor analysis, confirmatory factor analysis (CFA) is conducted to quantify, test and confirmed hypothetical structure of the relationships among a set of considered measures (Raykov and Marcoulides, 2008). The intention is to identify latent factors that account for the variation and co- variation among a set of indicators.

In this research, the results from the exploratory factor analysis indicated a four-factor model as perceived performance value, perceived price value, perceived relationship building value and perceived co-creation of value. Thus, for the purpose of CFA, a four-factor model is used for the subsequent analysis.

Applying Maximum Likelihood estimation using AMOS 22 performs the assessment of measurement model by confirmatory factor approach. Using AMOS, the four-factor model is subjected to CFA analysis. The initial CFA results indicated that all exogenous (independent) variables were significant indicators of Customer satisfaction ($p < 0.001$).

Table 4.9 & 4.10 provides the results of the regression weights, initial CFA and squared multiple correlations for all the variables. The squared multiple correlations indicated that the dependent variable with the highest proportion of variance that explained this model was S2q4 with 69%, followed by S4q3 (66%), while the lowest proportion was on S3q6, with 38% of the variance.

Table 4-9: Regression weights: (Group number 1- Default model)

	Estimate	S.E	C.R	P
S1q6 <--- perceived performance value	1.000			
S1q5 <--- perceived performance value	1.043	.112	9.354	***
S1q4 <--- perceived performance value	1.059	.105	10.071	***
S1q3 <--- perceived performance value	1.166	.111	10.497	***
S1q2 <--- perceived performance value	.899	.095	9.454	***
S1q1 <--- perceived performance value	.892	.097	9.193	***

S2q5 <--- perceived price value	1.000			
S2q4 <--- perceived price value	1.202	.109	11.070	***
S2q3 <--- perceived price value	1.126	.108	10.432	***
S2q2 <--- perceived price value	1.063	.103	10.328	***
S2q1 <--- perceived price value	1.122	.110	10.185	***
S3q6 <--- perceived relationship building value	1.000			
S3q5<--- perceived relationship building value	1.056	.112	9.389	***
S3q4 <--- perceived relationship building value	1.164	.124	9.377	***
S3q3 <--- perceived relationship building value	1.012	.120	8.427	***
S3q2 <--- perceived relationship building value	1.319	.135	9.771	***
S3q1 <--- perceived relationship building value	1.100	.115	9.592	***
S4q7 <--- perceived co-creation value	1.000			
S4q6 <--- perceived co-creation value	1.006	.102	9.849	***
S4q5 <--- perceived co-creation value	1.112	.115	9.707	***
S4q4 <--- perceived co-creation value	1.041	.102	10.183	***
S4q3 <--- perceived co-creation value	1.235	.110	11.185	***
S4q2 <--- perceived co-creation value	.990	.100	9.858	***
S4q1 <--- perceived co-creation value	1.110	.102	10.876	***

*** Indicates significant at $p < 0.001$

Table 4-10: Squared Multiple Correlations (Group number 1 – Default model)

Variables	Estimates
S4q1	.615
S4q2	.483
S4q3	.661
S4q4	.522
S4q5	.465
S4q6	.481
S4q7	.432
S3q1	.559
S3q2	.591
S3q3	.393
S3q4	.523
S3q5	.525
S3q6	.385
S2q1	.551
S2q2	.572
S2q3	.587
S2q4	.696
S2q5	.426
S1q1	.429
S1q2	.458
S1q3	.597
S1q4	.535
S1q5	.447
S1q6	.445

AMOS was run for initial CFA and output for the initial CFA in Figure 4.1 suggested that the statistically significant pattern and structure coefficients indicated that customer satisfaction model was composed of the four measured variables named in the model. The range of moderate to strong loadings were found with variables associated with “perceived performance value”, “perceived price value”, “perceived relationship building value” and “co-creation of value”.

The lowest loadings were on variables s3q6 (0.62) and s3q3 (0.63). The relationship among the observed variables was characterized by the covariance among the variables contained in a sample covariance matrix. This matrix is decomposed by a model that assumes that unobserved variables are generating the pattern or structure among observed variables. A covariance matrix in CFA is more or less like the correlation matrix in EFA. The initial CFA shown in Figure 4.1 indicates that the covariances within the CFA range are mostly low (e.g. value of 0.01 between “perceived performance value” and “perceived price value”). This further indicates that the latent variables or factors fit well with one another.

In order to confirm the finding of the EFA and CFA and to study the underlying relation between components of value offering elements and customer satisfaction, an initial structural model was fitted to the data, this is reported in figure 4.2 the path diagram highlights the structural relationship between customer satisfaction and the four respective variables.

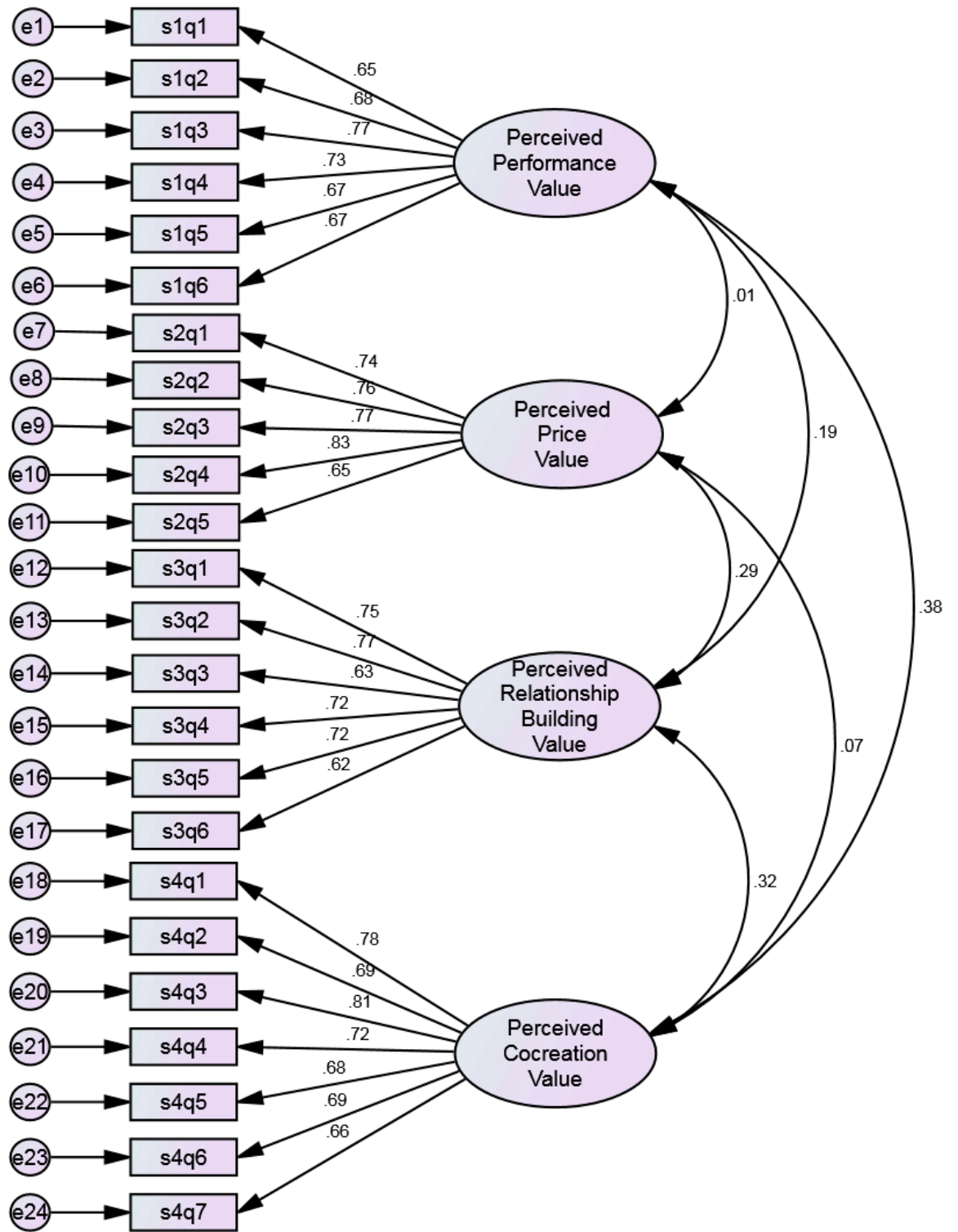


Figure 4.1: path diagram showing initial hypothesized first-order confirmatory factor analysis model with standardized coefficients

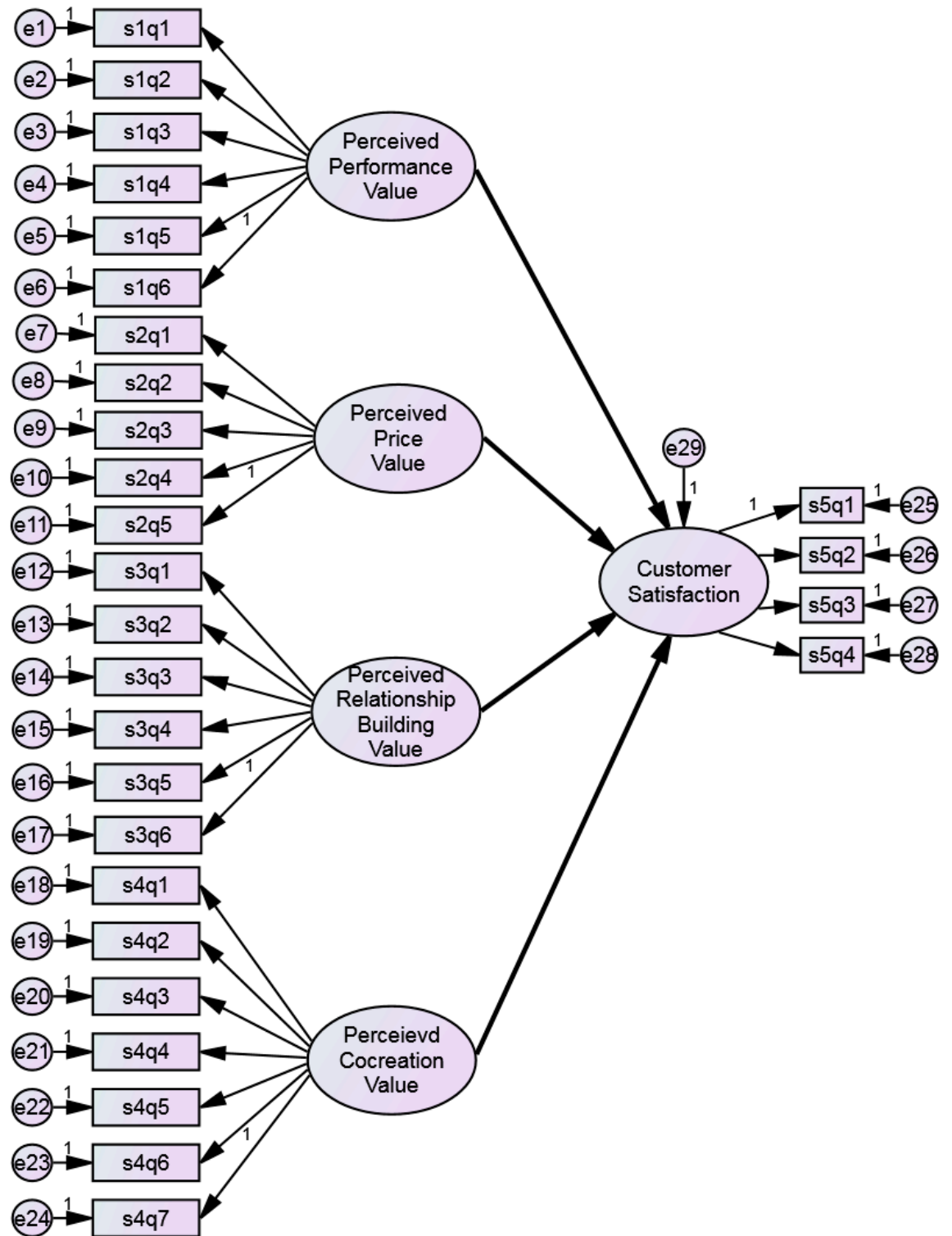


Figure 4.2 Initial structure model

4-2-6 Assessment of model fit for the confirmatory factor analysis

The proposed model was tested, this is based on the research hypotheses, on the basis of the measurement model. In order to confirm the findings from the exploratory factor analysis and to study the underlying relation between value offering elements, the CFA model was by examining the covariance matrix, path estimates and t-values.

The results showed that all the examined paths were statistically significant at p -value < 0.001 . In order to assess the model fit, a two-step approach was adopted. The initial results revealed that chi square statistics (χ^2) is 504.680 with degrees of freedom (df) equal to 246 (CMIN/DF= 2.052) was significant at $p < 0.001$, indicating that fit of data to the model was good ($\chi^2/df < 3$).

However, it was unreasonable to rely on the χ^2 statistics alone as sole indicator for evaluating the model, as this statistic is sensitive to sample size and very sensitive to the violations of the assumptions of normality.

Therefore, other fit indices, GFI, AGFI, CFI, NFI and RMSEA, were used to assess the specification of the model. Results revealed the initial values of GFI=0.860, AGFI=0.829, CFI=0.910, NFI=0.839 and RMSEA=0.063 (Table 4.11). The RMSEA value of 0.063 is between the recommended value of 0.03 to 0.08, which indicates better fit.

However, the CFI is slightly below the cut-off point of 0.95, AGFI is between the recommended values of good fit range of 0.80-0.90, while GFI and NFI are both slightly below the recommended threshold values. These results indicated the need for further refinement of the model as they were not consistent with the recommended values of the fit indices of the a priori specified measurement model.

	Absolute fit indices					Incremental fit indices		Parsimony fit indices
	χ^2	Df	χ^2/df	GFI	RMSEA	NFI	CFI	AGFI
Criteria			< 3	$\geq .90$	$.03 < x < .08$	$\geq .90$	$\geq .95$	$\geq .80$
Results	504.680	246	2.052	.860	.063	.839	.910	.829

Table 4.11 goodness of fit statistics for the initial CFA

Given the fact that some of the fit indices of the initial run of CFA, such as GFI, NFI, and CFI, were not within the recommended threshold values, further detailed evaluation was conducted to refine and re-specify the model in order to improve discriminant validity and achieve a better fit of model (Kline, 2005). factor loadings should be greater than 0.7 and in order to modify the model, model modification criteria were used. Modification indices (MI) that show high covariance and demonstrate high regression weights are candidates for deletion (Hair, et al., 2013).

Following these recommended criteria, the four-factor model was re-run until a better-fit model had been achieved. The following table (Table 4.12) summarizes the assessment steps of model fit until an improved version of the model was achieved. The final CFA model is Model 4 (Table 4.12). Modification indices (MI) which had the highest covariances among the same exogenous variables, which in this case was e12 to e13, e23 to e24 and e24 to e18, were then taken into account by putting covariances between those residuals.

The CFA was re-run for assessing the model fit. The results showed that the goodness of fit indices were improved and the revised model demonstrated a better fit to the data. The result of the respective measurement model indicated that the absolute fit measures, GFI and RMSEA, were .893 and .046, respectively; the incremental fit measures, NFI and CFI, were .879 and .953, respectively and the parsimony fit measure, AGFI, was 0.868. All of

these measures, except NFI, surpassed the minimum threshold values.

In addition to these indices, the ratio of χ^2/df was 1.558 which was within the acceptable threshold level ($\chi^2/df < 3$). The final confirmatory factor analysis model is shown in Figure 4.3 in which three significant correlations were found among error terms.

Significant loadings of moderate to strong loadings were obtained on almost all the four variables, which was consistent with the previous results from the exploratory factor analysis.

Model	Fit indices	χ^2/df	GFI	RMSEA	NFI	CFI	AGFI
	Criteria	< 3	$\geq .90$	$.03 < x < .08$	$\geq .90$	$\geq .95$	$\geq .80$
Model 2 [MI applied on e12 and e13]		1.715	.881	.052	.866	.939	.854
Model 3 [MI applied on e23 and e24]		1.593	.891	.047	.876	.949	.866
Model 4 [MI applied on e18 and e24]		1.558	.893	.046	.879	.953	.868

Table 4.12: How the final CFA model is achieved

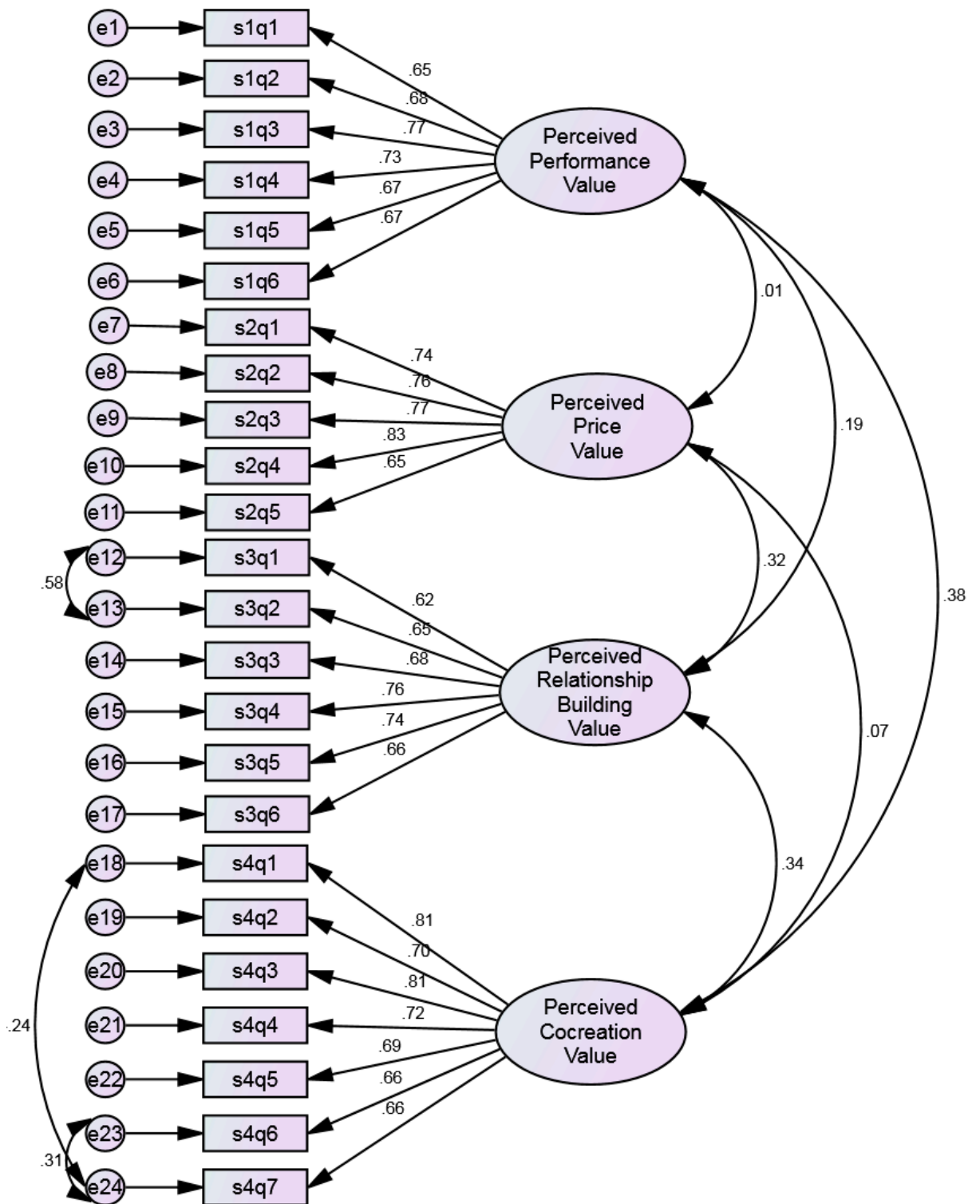


Figure 4.3 : final confirmatory factor analysis model

The final confirmatory factor analysis indicates that among all exogenous variables related to the perceived performance value construct, S1Q3 (The firm products that are exactly what I want) and S1Q4 (The company provides me products that exceed my expectations) have the highest factor loadings and they have reasonably strong loadings of .77 and .73. In terms of variables related to price value, S2Q4 (I feel the prices offered by the firm are valuable) has the highest factor loading (.83). Besides, variables S2Q1 (Prices are fair in comparison with the other brand's prices), S2Q2 (Prices offered by this company are consistent) and S2Q3 (Prices are beneficial for me) have strong factor loadings (.74, .76, .77).

According to exogenous variables related to relationship building value, S3Q4 (The firm is looking for having a long-term relationship with me) and S3Q5 (The company regularly offers me some extra services and add-on values) have the highest factor loadings (.76, .74). In terms of variables related to co-creation of value, S4Q1 (The firm interacts with me to give a better service) and S4Q3 (The firm interacts with me to make offerings that are match with my needs) have the highest factor loadings (.81).

4-2-7 Common method bias

After you reach to the final model of confirmatory factor analysis and before going to the structural model, it is necessary to check for common method bias. There are different ways to do a common method bias test. One of the ways is commonly factor method. In this method performed in AMOS, we make a common latent factor by adding a latent factor to our model. Then we connect this latent factor to one of each observed value (Indicators) reported in figure 4.4.

We check standardized regression weights table. All regression weights with this new variable (CLF) are compared with regression weights of variables without this new variable (CLF) and you should check difference between variable's regression weights once they are with CLF and when they are not with CLF and any difference greater than 0.2 between them shows that there is common method bias in data set and it means there are some common

method bias on that factor and we should retain the new drawn latent factor (CLF) as we are moving to structural model.

In this research, all variables are showing close regression weight estimation with or without CLF and it means there is no common method bias regarding our variables. Also, we assess the impact of common method variance using a post hoc approach. Harman's one-factor test was to examine the extent of the potential bias (Podsakoff & Organ, 1986).

As prescribed by Harman's test, we do use any rotation solution for factors and all variables are put into just one factor and we constraint the number of factors to one. So in the result only one factor is going to emerge and if this factor explains more than 50% of the variance, it means there is a common method bias on our data set (Podsakoff & Organ, 1986).

Results of the Harman's test done through exploratory factor analysis identifies that 24.8% of variances are explained by a single factor so we can conclude that data set does not suffer from common method bias issue because the variance explained by a single factor is less than 50%.

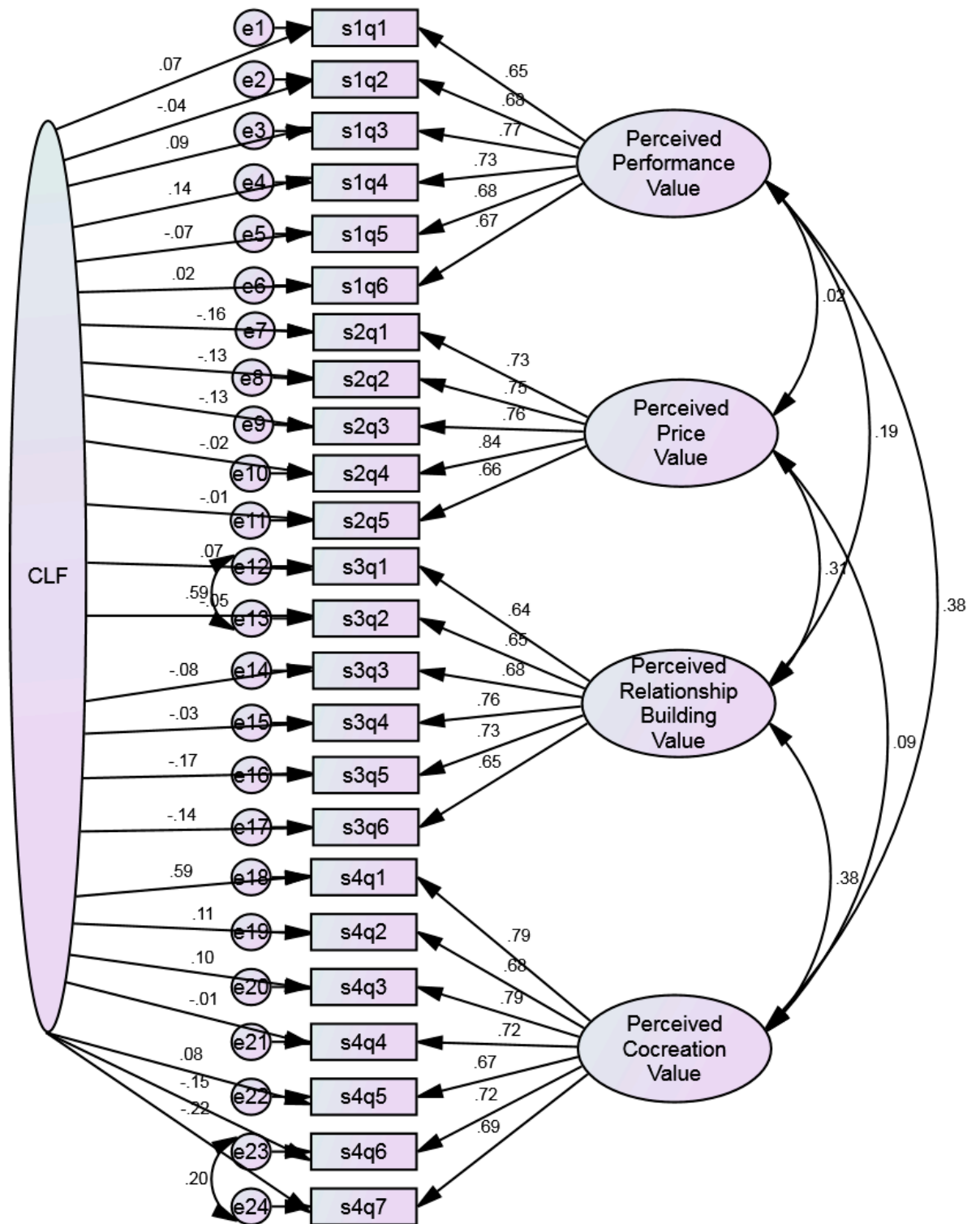


Figure 4.4 : Common method bias

After passing common method bias test, we are able to produce the full structural model as it is shown with factor loadings, path value and covariance in Figure 4.5.

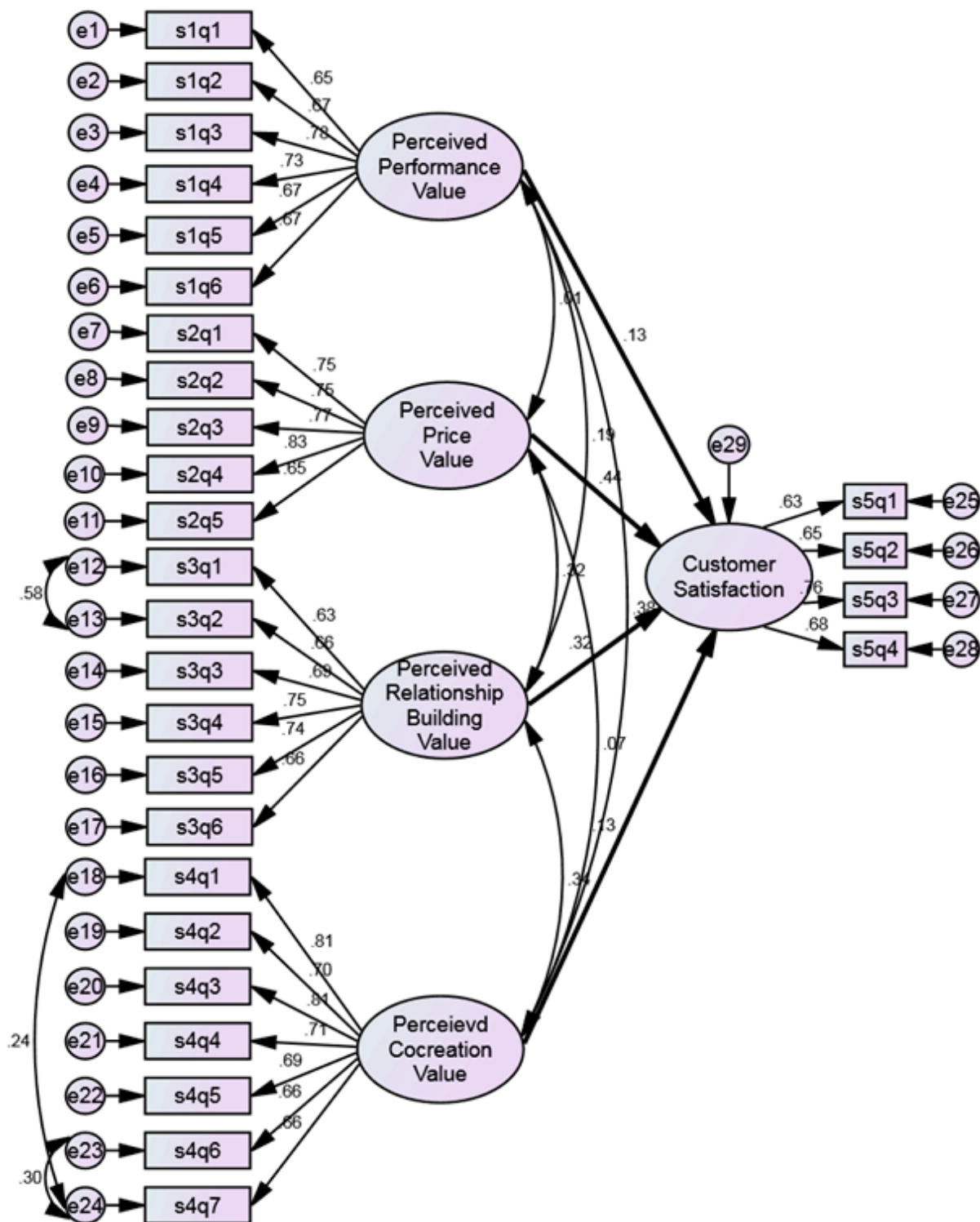


Figure 4.5: full structural model

4-2-8 Test of Multicollinearity

Multicollinearity was tested, this is done when more than two variables predict another variable. Multicollinearity is the assessment of *the extent to which a variable can be explained by the other variables in the analysis* (Hair, *et al.*, 2013, p.91). It is a problem related to the correlation matrix in which three or more independent variables are highly correlated (i.e. 0.90 or above) to each other (Hair, *et al.*, 2013). The presence of a higher level of multicollinearity results in lowering the unique variance explained by each independent variable (β -value) and increases the shared prediction percentage (Hair, *et al.*, 2013).

This means that the presence of multicollinearity limits the size of regression value and makes it difficult to understand the contribution of each individual independent variable (Field, 2009). In this case, perceived performance value, perceived price value, perceived relationship building value and perceived co-creation value all required multicollinearity test because they are on the same level and all are predicting customer satisfaction construct. This was achieved through SPSS for the composite forms of all these four mentioned constructs.

By looking at coefficient table and specifically the value of variance inflation factors (VIF) and tolerance impact, we can conclude if there is any multicollinearity regarding our variables. If VIF is less than 10, it is acceptable.

If they are less than 3, it will be the ideal case. In this research VIF between independent variables are all less than 3 (ranging from 1.05 to 1.43) and it means there is no multicollinearity issue regarding perceived performance value, perceived price value, perceived relationship building value and perceived co-creation value. Besides, the tolerance showed values of above 0.1 for all variables which indicated absence of multicollinearity.

4-2-9 Hypothesis testing

This section presents the result of hypothesis testing. Table 4.13 shows four hypotheses, represented by the causal paths (H1, H2, H3, H4) that were used to test the relationship between the latent constructs.

In structural equation modeling terms, the latent constructs used in the proposed conceptual model were classified into two main categories: exogenous (independent) and endogenous (dependent) variables.

Exogenous constructs were perceived performance value, perceived price value, perceived relationship building value and perceived co-creation of value, while endogenous construct consisted of customer satisfaction.

Hypothesis H1 predicts that perceived performance value is significantly and positively related to customer satisfaction. The results indicated that the relationship is marginally positive and significant (standardized regression weight = .135, $p = .067$), thus H1 is marginally supported.

Hypothesis H2 predicts a significant and positive relationship between perceived price value to customer satisfaction. The results suggested that H2 is supported (standardized regression weight = .444, $p < 0.001$).

Hypothesis H3 predicts that perceived relationship building value is significantly and positively related to customer satisfaction and the results indicated that H3 is also supported (standardized regression weight = .321, $p < 0.001$).

The results also showed that hypothesis H4, which suggested that the perceived co-creation of value is significantly and positively related to satisfaction with customer satisfaction, is marginally supported (standardized regression weight = .134, $p = .077$).

Hypothesis	Result
H1: Perceived performance value significantly and positively impacts customer satisfaction.	Marginally Supported P=.067
H2: Perceived price value significantly and positively impacts customer satisfaction.	Supported P<.001
H3: Perceived relationship building value significantly and positively impacts customer satisfaction.	Supported P<.001
H4: Perceived co-creation of value significantly and positively impacts customer satisfaction.	Marginally Supported P=.077

Table 4.13: Hypothesis testing

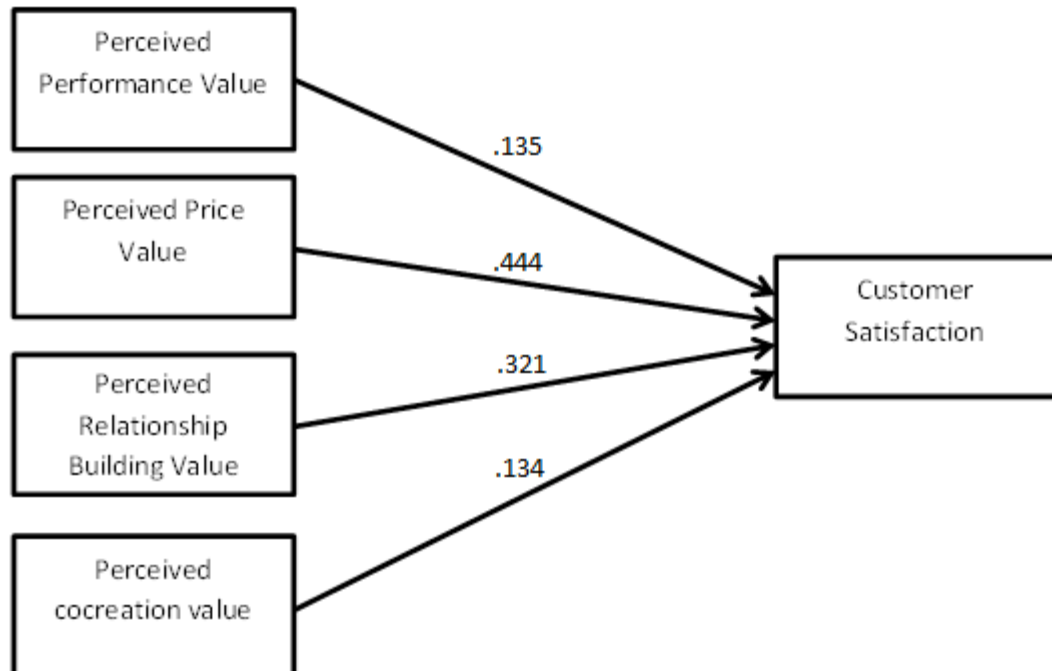


Figure 4.6 Best-fit model of study

4-3. Objective 2: to understand the nature of customer satisfaction.

In the second objective, the nature of customer satisfaction is identified, and analyzed to determine what makes customers satisfied or unsatisfied. In the previous section, based on the regression between the value offering elements and customer satisfaction, the relative importance of the value offering elements was shown, and this indicated which value offering elements are more regressed with customer satisfaction. In the current section, the focus will be narrowed explore the nature of customer satisfaction, so as to explore its nature in detail.

To achieve this, the interview data were used. Related themes found in the interviews were identified for each main construct of the study. By reviewing the related themes of each construct, we can analyze the nature of customers' satisfaction and understand how customers look at each element of value offering, and what makes them satisfied or unsatisfied regarding each element of value offering. The themes related to each element of value offering are discussed in turn, in the following sections.

4.3.1 Price value

4.3.1.1 Fair price

Most of the dentists say that they should feel the fairness of prices, and that offering a quality implant should not allow companies to establish very high prices. Companies should set their prices in comparison to the usual price of implants in the market.

UNSAT 5 emphasized: *We cannot ignore the role of price. When I feel the fairness of prices, it tempts me to buy more from a company.* Some of the customers show an awareness that the price should be fair for both companies and customers. One of the satisfied customers (SAT 3) said:

When I say a fair price is necessary for a product to find a good position in the market, I do not refer to a price so low price that the manufacturer loses money on its production. The company must make a profit, so what I refer to is a price point that is

satisfactory to me, the consumer, and to the company, so that it is fair and profitable for both parties. I feel that whenever I mention price fairness to companies' representatives, they understand that to mean a very low price that is beneficial only to me. This is not what I mean; I define the fairness of price in comparison to the prices of competitors offering the same level of products.

Many customers (UNSAT 1, UNSAT 7, SAT 4, SAT 8) said that their minimum expectation is to see fair prices offered by the companies, and that this factor is strongly influencing their overall feeling of satisfaction.

4.3.1.2 Consistency

In the interviews, many dentists (UNSAT 2, UNSAT 3, SAT 6, SAT 8) complained about the fact that companies in Iran increase the prices at the start of each year, making excuses such as inflation or the political situation of the country. This issue truly bothers most dentists, and they prefer to see consistent and fixed prices over a long period of time.

UNSAT 7 explained: *It really bothers me when companies by the start of new year change their prices because of some excuses like inflation rate or raw material costs. It makes me feel the company is unreliable, for changing the prices in a short period of time.*

Many customers (SAT3, SAT4, SAT7, UNSAT 2) believe that consistency in pricing is much better than providing discounts in different periods of times. They also believe that if a company keeps their prices constant for a longer period of time, it can increase the loyalty of the customers. In their point of view, this strategy works better for the firms than occasional discounts. One of the customers (SAT5) said:

I prefer a product at a consistent price over the long-term as opposed to one with a cheaper price in the short-term. Using implants is my work, and I use a lot of them, and if I know that the price is fixed for a longer period of time, I can plan my budget and rely on the availability of the product at a certain, agreed upon cost. When a product is cheap one day and expensive the next, price fluctuation exists. This would ruin my budgetary plans and create conflict with my patients as they are expecting the service at a specified price. If they cannot depend

on a predictable price, I will lose patients because of this. Generally, I am most satisfied when I purchase products at a consistent price.

4.3.1.3 Beneficial prices

Dentists invest considerable money and time in the practice of their profession and expect to see some profit in return in order to maintain their life and business. One dentist (UNSAT8) said:

It is important realize some benefits from my implant purchases from a company. That does not mean the quality is unimportant to me or that my only concern is the price, not at all. Apart from being able to rely on the quality of the product, I must feel that the company benefits from me buying an implant. When buying implants, I will consider the beneficial aspect of their prices as well.

Another dentist (SAT 1) agrees with his colleagues, saying:

In my work, I have certain basic costs of doing business such as clinic rent, assistants' salaries and so on. I must feel that working with a particular company provides more benefits to me than working with another company would; this way, I am encouraged to work with this company. I do this work and expect it to be beneficial to me. When I am confident in the benefits, my mind is free to focus on my work. This is satisfying to me and enables me to provide better service to my patients.

One of the dentists (UNSAT 7) shared his experience of beneficial pricing as follows:

At one point, I was purchasing a very high-quality, expensive product from a certain company. After working with this product for a short time, I realized that the benefits and profits of using this implant were marginal for me, and that if I wanted to continue to use this implant, I would have to charge my customers more. Working with this product was counterproductive to my business interests; there are many implantologists in my city and patients could readily leave me and go to another dentist. I communicated this to the company; however, they chose not to deal with it. They did not change their pricing so that it was practical for me because they relied so heavily on their reputation for the high quality of their products. The company assumed that I would continue to use

their products because of this. However, I decided to stop purchasing from them as their prices were not beneficial to me and their products did not offer any unique attributes. With research, I was able to identify an implant of the same quality at a lower price from a different company. I was extremely upset about the original provider's manner of dealing with my complaint. I never bought from them again.

The other dentists (SAT 3, SAT 8) also mentioned this point in their interviews, believing that beneficial pricing of a dental implant is one of the very basic features of it, and stating that their satisfaction is complete when they see benefit for their business.

4.3.1.4 Valuable prices

The customers mention that they even buy an expensive implant if they feel that the value of the product is transferred to them. They want to see that it is worth to pay a certain price for a product. The price should be right and valuable based on the product quality. The fourth theme of this dimension is therefore “valuable price”. UNSAT 1 said:

It does not matter to me how expensive a product is. Even though I am sensitive to prices, I buy expensive products if they are worth paying for and the value of the price is demonstrated to me. Sometimes, you must pay more for higher quality, and I understand that to get such a high quality, I may have to pay more.

One of the dentists (SAT 1) said:

A company that provides an average quality implant with standard features and components should not expect to receive positive feedback on their high price. However, when a company sells an implant manufactured in a highly-regarded country such as the USA or Germany, which has special features, such as a unique surface treatment or a very good design with a full range of sizes, and provides something unique and valuable to the customers, the company's high price is perceived by me as a value-based price. I will opt to pay more for this product and deem the higher price justifiable.

4.3.1.5 Affordable payment

This item was important from customers' point of view. In the interview they explained that having more payment options could give them more purchase power. One of the customers (SAT 7) commented about this: *Giving more options for payment is suitable for me and makes me able to buy more items. If the company trusts me and gives me a chance to pay at a later time, it transfers a good sense from the company to me and I prefer to keep business with such companies.*

Other customers (UNSAT 2, SAT 4, SAT 8) consider the affordable payment option as a sign of the company's interest in continuing business with their customers. They say this is a respectful signal from the company to the customers, indicating that they like to keep them as customers for a longer period of time. It shows that they know the value of their customers and that they try to keep them in by offering such offers.

4.3.2 Relationship building value

4.3.2.1 Accessibility

This refers to the idea that the firms should be accessible to the customers at any time. One customer (UNSAT 4) said:

Dental implantation work is somewhat unpredictable, requiring easy, immediate access to the company at all times. It is likely that the company's representative will need to be available outside of their regular working hours. When I feel the company is accessible at any time to deal with my questions or concerns about my work with their product, I feel confident, and that allows me to better concentrate on my work and provide the best service to my patients.

Another customer (SAT 2) commented: *There are some urgent moments at which you need help from the company. It is important for me to work with a company available all the time.*

In today's business environment it is necessary to give customers excellent service, and companies try to give better service to their customers than their competitors do. Being available to the customers at any time can distinguish one company's service from that of the others.

Many dentists (UNSAT 3, UNSAT 5, SAT 5, SAT 6) mentioned that when a company is ready to answer to their customers at any time, they transfer the message to their customers that they are there for them without leaving them alone at any time. As a customer, you then feel safe to buy from this company because you have this guarantee that they will support you in difficult situations. UNSAT 2 said:

Accessibility to the company at any time is essential for the customers. If companies are interested in satisfying their customers, it is imperative that they concentrate on this aspect of their service. However, many companies advertise that they are accessible at any time, but in reality, they are not. I once bought several implants from a company, inserted them into patients' mouths and, after a short time, most of the patients came back with a broken hex, which requires replacement of the implant. I called the company, as they had guaranteed their products for life and had promised to solve any problem, at any time. Thus, I expected to have this problem resolved in a timely fashion. However, not only they did not replace the products and solve the problem, they indicated that I was responsible for the problem. They blamed me for having broken the implant hex due to the way I had inserted and forced it. I filed a formal complaint against the company, which is still ongoing after three years. I continue to pursue this case in court. This company claimed to be supportive and accessible, but I found myself in a legal battle with them. This behaviour represents a dangerous, expensive, dishonest and unacceptable business practice.

It seems that the concept of accessibility has become a kind of cliché for many companies which we do not see in reality.

4.3.2.2 Responsiveness

It refers to the quick response to customers' enquiries. One dentist (UNSAT 8) commented:

Sometimes, I have an urgent need for something such as a component or a surgical kit, and I believe that the company should immediately respond to my needs and provide me with what I need. Several times, I have been in the middle of a surgery and encountered a problem, and I needed to talk to the company's technician and expected to have what I needed available as soon as possible to get my issue sorted.

The other customer (UNSAT 3) stated:

Some companies just think about the selling items and do not care about any post-sale service, and they think that when the transaction is finished, their job is done. But they are totally wrong and I need to get quick support from the company after my purchase.

It is very risky for the companies to not answer the enquiry of the customer, and as some of the customers (SAT 8, UNSAT 1, UNSAT 6) indicated, when their inquiry is ignored by a company or answered very late, they get unsatisfied and start looking for the same service offered by other companies.

So responsiveness influences customer satisfaction, a lack of it leads to dissatisfaction among customers. It could be that some companies use their high number of customers as an excuse for their late response to the customers, but as this does seem to be a logical excuse in customers' minds, they do not believe it. As one of the dentists (UNSAT 4) said:

It does not make sense to me that companies say they have so many customers to deal with and this is why their response time is so slow. Why should I, as a customer, have to wait for my urgent inquiry to be answered? Companies must make their customers their priority. When an urgent inquiry from a customer is received, it must be put first. Based on the importance of the inquiry, the company must then prioritize their customers' inquiries for the safety of implant patients and the success of their own business.

This customer advises that companies can use prioritization to improve their responsiveness to customers, even when they are so busy with a number inquiry.

4.3.2.3 Continues relationship

This refers to maintaining the relationship with individual customers. The dentists in this study believe that firms should think about maintaining the relationship with their customers. Many companies think wrongly that when they sell something to their customers, their job and relationship with the customer is finished. But that is a serious mistake.

The relationship starts from the pre-sale stage and continues to the post-sale stage for a company. Several customers (SAT 4, SAT 7, UNSAT 2, UNSAT 5) noted that when a company does not pay attention to maintaining a relationship with them, they will usually not stay loyal to the company even if the company offers a quality product. They believe that when a company is eager to maintain a relationship with them, it signals loyalty of the company to the customers. In return, the customers stay loyal to such companies more than to companies that are not interested in maintaining a relationship with their customers.

4.3.2.4 Long-term relationship

Companies should keep a long-term relationship with their customers. One customer (UNSAT 2) shared his experience of a long-term relationship as follows:

Many years ago, I was buying products from a company, and then I stopped purchasing from them for some time. Even then, they did not sever their relationship with me, and they just kept making contact with me on different occasions to ensure that I was okay. Their interested communication won me back as customer, and I began purchasing from them once again.

One of the customers (UNSAT 3) suggested:

Companies should be sensitive to long-term relationships with their customers. One way in which a company can show their positive attitude towards long-term relationships is by rewarding those customers who have been loyal to the company for many years. For example, if they offer special services to customers who have been working with them for more than five years, they show how important that long-term relationship is to them. They demonstrate that

customers who stay with them for long periods of time receive special benefits that customers of fewer years do not get. Such rewards, based on the length of the relationship, send a direct message to the customers that the company nurtures long-term relationships with its customers.

4.3.2.5 Add-on value

The dentists in this study made clear that extra offers, services, and add-on value offers from companies can motivate them to buy more from those companies. The dentists like to see such services offered by the companies regularly. Most of the customers (UNSAT 2, UNSAT 6, SAT 3, SAT 5, SAT 7) believe that companies can provide them with complementary products or services as a bonus on different occasions, and that it can establish a good mental image of the company.

Another customer (UNSAT 8) said: *Companies should identify the baseline value of their products and try to add something beyond that in order to make their add-on value services visible for customers. The problem that some companies have is that they provide a service to their customers thinking that their service is value added. However, from the customers' point of view, it is just a basic service which is expected to be offered by the company, meaning that they do not see any add-on value feature in it. This misunderstanding between customers and companies can be very harmful to both parties.*

4.3.2.6 Respect

This means that the customers should feel respect from the company, and that they should recognize they are considered an important person. Customers like to be treated as someone special by the company, and like to see that they are respected and valued by the company. One of the customers (SAT 8) said:

Every month, I meet with various companies' representatives, and sometimes they offer me special offers to encourage me to purchase from them. Sometimes, I buy something from a company

because of the way I am treated. It is important for me to work with someone who realizes my value and position in this field.

Other customers (SAT 6, SAT 7, UNSAT 1, UNSAT 5) indicate the same points. They believe that when there is a high degree of respect from the company towards them, the company treats them in a special manner, and they are considered an important person from the company's perspective, they feel a great deal of satisfaction and they prefer to keep doing business with this company.

Getting such respect and behavior from the company can make customers highly satisfied about their purchase experience. On the other hand, not seeing such behavior from companies can lead to dissatisfaction among customers. For example, one of the customers (UNSAT 3) shared the following experience of working with a company:

Several years ago, when dental implants were distributed by only a few companies, I was buying them from a well-known company. Since there were few distributors, we, as customers, did not have many options to choose from. The companies were in a strong power position. I recall that, at that time, the concept of "respect" was lacking in the companies' vocabulary. I was treated casually and sometimes badly by the companies; I decided not to work in the dental implant field for many years because of this treatment. Instead, I focused on general dentistry for many years. After some years, when the number of implant distributors increased, I returned to work in this field. At this point in time, I noted that the same company behaved differently towards me, most likely because they realized how important it was to keep their customers happy, especially as they now have so many competitors. Dentists can easily take their business to another provider if they are not treated well.

Another dentist (UNSAT 8) states that when a company treats her as a valuable and important person in exhibitions and congresses, and she receives a VIP service from the company, she feels very satisfied. She added that sometimes such behavior persuades her to buy more from a company, even when the quality of their product is lower than that of the other companies' products.

For this customer, receiving a great deal of respect is the most important factor while choosing a dental provider. She reaches her maximum level of

satisfaction through this factor rather than through any of the others factors such as quality or price.

4.3.3 Performance value

4.3.3.1 Personal preferences

This means having a product that matches personal preferences. Many of the dentists indicated that they preferred an implant with external fixture rather than an internal one, and even though external fixture is something of 15 to 20 years earlier and most companies today produce implants with internal fixture, many dentists still prefer to have an external one for personal reasons.

One of the customers (UNSAT 3) said: *I personally prefer to use external implants rather than internal ones despite the fact that the internal ones are more popular among my colleagues.* This shows that the company should be ready for such requests from customers. Sometimes the personal preferences of customers look unusual from the company's point of view, leads to the company not taking care of them. However, the company should be informed that this behavior could lead to a loss of customers. Another customer (SAT 4) mentioned:

One reason that I remained loyal to MTA was that they always tried to fulfil my unique requests to them. Many times when I asked for something different from other companies, instead of providing me with that material, they tried to persuade me that they had something better. They'd say that the one I was asking for was out of style or no longer helpful, and they tried to convince me that I was wrong. They failed to satisfy my request because, according to them, it was not useful or practical and they had something better to offer me. They did not think it was logical or efficient to give me what I wanted. Actually, when it comes to personal preferences in my work, my area of expertise, I know better than anyone else what is useful or not useful to me at any given moment and in any given situation.

SAT 6, SAT8 and UNSAT4 stated the same point in their interviews and believed that paying attention to customers' personal preferences is the key of success for the companies.

Many times such personal preferences are based on a particular belief, culture or religion. For example, one of the materials we provide dentists with is dental bone graft, which is something complementary to dental implants and is needed in most surgeries. The origin of these bone grafts is either bovine or porcine. Clinical studies show porcine-based bone grafts are performing better in terms of adhesion to natural bone. But many dentists in Iran prefer to use the bovine ones, because of their personal preferences that come from their religious beliefs.

They prefer not to use porcine-based products on the basis of their religious beliefs, even though this type of bone graft works better. This shows that some personal preferences have a very strong background and that it is not easy to change those in a short amount of time.

4.3.3.2 High quality

This means having a quality product in comparison with other available implants on the market. One of the dentists (UNSAT 4) mentioned that today most implants on the market, even those coming from China and Korea, have a reasonable level of quality, and that if a company claims that their products are from the highest quality, their advantage over other brands of implants should be noticeable.

Another customer (SAT 4) shared this opinion and emphasized: *These days, most of the implants in the market have the basic necessary qualities, and when buying them, I will compare the details of the implants produced by different distributors and then decide to choose the highest quality one.*

UNSAT8 said:

I personally have certain expectations from a quality dental implant. When a dental implant fulfils my expectations and requirements, I am confident about its usefulness, am satisfied with it and consider it a high-quality product. Fulfilling my expectations is my main criterion for the quality of the product.

The other dentists have another criteria for quality. SAT 1, SAT5, UNSAT2, UNSAT6 and UNSAT 7 consider standards and clinical papers as their criteria for quality implants and share the following opinions: A quality product has different standards and clinical papers proofing them. The famous standards like CE and FDA can make us confident about the quality of a product because we know that when a dental implant has the standard of Europe and America, it is reliable to work with. We then know that they are used in advanced countries. These kinds of standards and clinical papers represent a high quality dental implant. The certification of quality standards is thus a priority for a dentist to ensure while purchasing.

4.3.3.3 Customers' needs

This concerns providing the product that is exactly what a dentist needs. Most customers have a set of basic needs that they want from a service or product and companies should make sure that they know these basic needs and consider them in their strategies. One of the dentists (UNSAT 1) said:

When I indicate to a company that I need an implant, it means that I need a high-quality product of modern design that is available in various sizes with complete prosthetic components, supported by substantial clinical research and made in a country with an excellent reputation in the dentistry field. I am happy when a company provides me with the exact products that I require; that is what I search for. It is my minimum requirement.

Another dentist (SAT 2) stated: *I think it is important for a company to succeed at understanding what exactly I need and since this field of work is specialized, it is likely to see some misunderstandings between my need and the companies offers.* In other words, in such a specialized field as dental implants, it might be difficult to provide the customer with their needs. Companies should take the trouble to listen to the voice of their customers in order to find out what their specific needs are, and they have to be technical enough to understand those needs.

4.3.3.4 Exceeding customers' expectations

Companies should not only meet customers' expectations, but should also offer services and products to customers that exceed their expectations.

Because of the growing number of companies that distribute implants in Iran, the company should give a product that exceeds customers' expectations, in order to persuade them to continue making their purchases.

UNSAT 8 said: *Today, the purchase power of transaction is in customers' hands, and I as a dentist have expectations higher than the basic ones of distributors, and I like to see the products that meet my expectations and even higher.*

UNSAT 5, SAT 8, SAT 2 believe that if a company wants to exceed their expectations, it needs to pay more attention to the feedback of customers. When companies get feedback from their customers they can discover what exactly their customers' expectations are and what the weaknesses and strengths of their products are. The feedback of customers helps companies to solve issues and to deliver better service to customers, in order to exceed their expectations.

The dentists truly like to see companies willing to listen to their feedback, and when companies value feedback, customers will feel satisfaction. This good feeling which is then transferred to the customers can be a big step for a company that wants to exceed its customers' expectations.

SAT 3 mentioned: *The more the company meets my expectations, the more satisfied I will be. And when I see that the company tries to exceed my expectations, it means a lot to me and I realize that I am a valuable person for them.* Another customer (UNSAT 6) said:

If companies are attempting to exceed our expectations, they must get to know us better, and they have to listen to our opinions more. The problem with some of the companies is that they do not see implantologists as part of the solution; they usually see us as part of the problem.

Two other dentists (SAT 1, SAT 7) believe that sometimes focusing on small things can make a considerable difference. For example, if a company sends something small to a customer for his/her birthday, or contacts a customer to

say best wishes, it is likely to surprise the customer, for it shows that the company cares about him/her as a person rather than as a business target or source of revenue. If a company pays attention to the feelings of customers, this can be helpful in terms of exceeding expectations and satisfaction.

4.3.3.5 Innovative features

Products with innovative features make up another important theme. A famous dentist (SAT 4) who attended the world's largest dental show in Germany explained his observations as follow: *All companies are aiming to simplify implant dentistry by using innovative implant technologies. Their goal is to make implant dentistry easier, faster, more profitable and more predictable. They are focusing on providing innovative quality products supported by professional service.* One of the other dentists (SAT 3) said: *The firm should catch up with the most up-to-date technology available. New designs of implants with some unique features are something that I like to see from companies continuously.* UNSAT 4 said:

When I mention to company representatives that their products or services are not trendy and innovative anymore when compared to those of other brands, they always respond that the innovative feature will appear in their new line of products sometime in the near future. When I hear this comment, I perceive it as an excuse, rather than as a plan or strategy, because I believe innovation is not solely about designing a new product or service. You can also innovate by focusing on existing products and services; by adding innovative features to current products, they can be improved.

4.3.3.6 Functionality

Customers believe that it is important to have a product with a high functionality such as the ease of working with it. There are many quality implants that are not used by many dentists because they are difficult to use. One customer (SAT 6) said: *Sometimes some of the implants are really hard to work with ...like a difficult insertion, or a complicated procedure to tighten*

them. And even though their quality is good, I prefer not to use them because they are not very usable.

Another dentist (SAT 4) mentioned:

Sometimes, we see a promising implant with a good design, but when I work with it, I discover problems with stability, lack of practical sizes or a shortage of related components. All of these weaknesses make this well-shaped implant useless and risky to use in a patient's mouth.

4.3.4 Co-creation of value

4.3.4.1 Joint quality service

This refers to interacting with customers to provide a better service. One of the customers (SAT 5) gave the following opinion about co-creation of value: *In my opinion, there should be close collaboration and open dialog between the companies and dentists, because this area of work is very specialized, and the knowledge of dentists can help the companies to offer a better service and products that meet our needs.*

The other dentists (UNSAT 2, UNSAT 4, SAT 6) shared this idea that companies should be in touch with customers in such a specialized field in order to get a better idea of quality service and products. In a specialized field as dental implants it sometimes happens that customers know more than companies about the products or the recent technologies and improvements in this field. Through their interaction with customers, companies can learn about these points to improve the quality of their service. Dentist (SAT 3) said:

Companies interested in providing better service should be in contact with us frequently; in the end, we are the measurement of their quality of service. If we are happy with their products and services, they can claim to be a good service provider, and their interactions with us enable them to improve their products. In our opinion, they can see the actual quality level by listening to our opinions. Implantologists can also demonstrate their products' strengths and weaknesses which, in turn, enables them to improve their products' quality.

4.3.4.2 Mobilizing offerings

It refers to working with customers for providing them with mobilizing offers. The customers (SAT 3, SAT 7, UNSAT 1) stated that companies have to work on their offering very carefully, prepare their offering in the best possible way, and make the most of their resources, in order to involve customers in their value creation process. By preparing a mobilizing value offer for the customers, the company can be hopeful to get satisfied customers.

4.3.4.3 Identified needs

This stands for interacting with customers in order to provide offers that match their needs. The dentists are very keen on interacting with companies, and they like to see more co-operation between them and companies and this point can be more desirable for them if they know that this mutual working is leading to a better service, offerings for themselves and in fact they are collaborating with companies to help them to enable them for giving a better service.

One of the dentists (UNSAT 7) mentioned the important role of interaction, and especially the role of listening to customers in the process of co-creation of value, as follows:

I think that, when the companies interact with me, they make the mistake of talking at me, rather than listening to me. However, if in the interaction, they listen to what I am saying, they can identify my needs and try to meet them. If companies use the interaction order to identify their customers' needs, they will be able to provide them with the products and services that match their needs. I believe that interacting with me is a great opportunity for them to identify my needs, provide better service and augment their business, all at the same time.

4.3.4.4 Engaging customers

This is about engaging customers in the service production process. One of the main concerns that the dentists have, is to have all the sizes of implants available at all times. Having all the sizes of implants available is very difficult

for the company. It requires a considerable stock, because together all sizes of implants constitute about 50.

Every month, the company considers its needs, after which it places an order to its mother company in Spain. Engaging the dentists in this process could solve the issue. If the dentists would provide the company with a well-organized report of their needed sizes for the coming month, the company could import the needed sizes for the dentists for that coming month. This would prevent any delays the delivery of the service and necessary products. One of the dentists (UNSAT 3) explained:

Whenever I ask for a commonly used implant size, the company tells me that it is out of stock and will be delivered to me in a number of weeks. However, I cannot keep my patient waiting for such a long time; I need to provide them with the necessary service as quickly as possible. This problem stems from a lack of communication between the company and me. If the company would involve me more in these processes, this problem would be solved, as I could inform them which sizes I need for the upcoming month. I could relay my needs when they are sending the order to the manufacturer, and in this way, integrate myself in their ordering system. I would be happy to do that because it would enable me to receive my products in a timely manner and provide better service to my patients.

There are some other benefits of the company engaging with customers, as one dentist (UNSAT 1) commented: *When I am engaged in a value process of the company, I feel a kind of commitment to this company and I feel this company is mine and I have had a part in their success.* Other dentists (SAT 2, SAT 5, UNSAT 4, UNSAT 7) confirmed this point, believing that when the company engages them in their business, they feel positive and consider it as respect coming from the company.

They try to be easy going with such companies and help them in necessary cases. They said that if the company informs them about the latest changes or any upcoming promotions of their products, it looks like they are their business partner rather than their customer. When they see this effort from the company to engage them, they feel satisfied and like to help the company.

4.3.4.5 Supporting system

This refers to providing support system to customers. A support system is a network of facilities, and of people who interact with customers for assistance and practical support. A dentist (SAT 2) mentioned:

We live in a computer and technology century, and the distributor companies should make the most of this. They need to support their customers by providing special customer support software, web support or other smart technologies. The more support I receive from the company, the more positive are my feelings about my purchase experience. This encourages me to buy more from this company.

UNSAT 4 said: *Support from the company is lacking sometimes, and many companies think that if they have a good product for a good price, that is it and they don't need to support the customers, but they are totally wrong.*

4.3.4.6 Trust

This refers to trust between the company and the customer. The customers stated that there should be trust between them and the company to start any co-creation of value. UNSAT 6 gives more detail about the necessary trust:

The basic principal for the co-creation of value is trust, and when there is a reasonable trust between the company and me, I can give my best ideas to the company. But, the company should like to hear my voice, and if I see their interest in my ideas, I will share them openly.

Many others (SAT 1, SAT 3, SAT 7, UNSAT 2, UNSAT 3, UNSAT 7) referred to trust as a foundation for any relationship between companies and customers. Both parties should trust each other if they wish to build a good relationship or having any co-creation or co-production of value. If there is no trust between the two parties, it is very difficult to see any co-operation between them, for neither is interested in hearing each other's ideas. Trust is

the key point for having any kind of interaction between customers and companies.

4.3.4.7 Eagerness

This is the eagerness of the company to learn the new ideas of its customers. The dentists believe that the company should be keen to hear their new ideas, and that this attitude from the company leads to a proper co-creation process. One dentist (UNSAT 8) said:

We, as doctors who have many years of experience in this field, can be very helpful to the companies by sharing new ideas. We can provide valuable technical comments regarding the design, materials and sizes of the implants in order to improve them. If the company staff is smart, they will consider applying our ideas to their work. We can give companies the hands-on experience that they lack, and seriously considering our ideas shows they respect us. This could be profitable for the company and lead to significant improvements in their products and services.

Another dentist (UNSAT 7) mentioned:

There should be a productive dialogue between me and the company. It is truly helpful for both of us because, from this, we can learn from each other. However, both partners should be interested in learning from each other and not take an aggressive stance towards new ideas. Through such dialogues, we can understand each other's needs better, and the companies can get to know us better. Also, when I see that a company is eager to my listen to my ideas, I am happy and feel satisfied, and I will try to help them.

Another dentist (SAT 6) told a story of his experience working with another company:

A few years ago, I was buying dental implants from a newly established company whose implants were made in Taiwan. However, I had some very basic issues with their products. When I mentioned these problems to them, they actively listened to me. They offered to sponsor a visit for me to Taiwan so that I could talk with the manufacturer's technical team in order to solve the issues related to the product. When I noted

their attitude and openness to my ideas, I tried to help them. Even though I had received offers to buy from the highly-reputed implant brands, I continued to purchase from this company also. I saw that they improved their products based on the feedback they had received from my colleagues and me. Today, this company has products with good features and a very solid network of informed customers. I truly believe that the company reached this point thanks to their openness to the new ideas provided by their customers.

The above interview quotes related to value offering elements reveal to us the specific points of interest of satisfied and unsatisfied customers.

The themes of the main constructs have other sub themes, which reveal the details of customer satisfaction in the context of dental implant purchases in Iran. By looking at the detail of these main themes, the nature of customer satisfaction is shown, and we can understand what makes them satisfied or unsatisfied.

4-3-5 The Main Themes

The following table shows the summary of all related points. Actually the main themes of the qualitative part were used in the survey and these main themes are made of some other smaller factors that are gained from the interviews and these sub-factors actually show that where the main themes used in the survey are coming from and they show the nature of each theme. All the main concepts, themes and sub-factors are presented in table 4-14.

Table 4-14 Transcription of interviews

Concepts		Main Themes		Influences on customer satisfaction	
Performance value	Personal preferences	- Customized implant		- Cultural based preferences	
	High quality	- Advantage over others brands - Meeting expectations		- Clinical papers - Standards	
	Customers' needs	- Modern design - Variety of sizes - Complete prosthetic components		- Reputable country of origin - Company's knowledgeable staff	
	Exceeding customers' expectation	- Feedback - Voice of customers		- Customers as part of the solution - Caring about customers' emotions	
	Innovative features	- Advanced implants - More handy implants		- Faster implants - Innovative existing products	
	Functionality	- Ease of working - Stability		- Complete sizes	
Price value	Fair prices	- Reasonable price for both parties		- Fairer price than the others	
	Consistency	- Fixed price for a long time - No excuse of inflation rate		- No excuse of political situation - No interruption of customers' cost plan	
	Beneficial prices	- Bringing profit to customers		- Profitable price	
	Valuable prices	- Worth paying for - Right price		- Transferring price value to customers - Price in line with quality	
	Affordable payment	- More payment options		- More purchase power to customers	
Relationship building value	Accessibility	- Available out of business hours - Ready for urgent enquires		- Guarantee for all-time support - A real availability	
	Responsiveness	- Quick response - Post-sale service		- Prioritization of customers	
	Continues relationship	- Maintaining relationship with customers			
	Long-term relationship	- Staying in touch in all the time		- Rewarding customers for their loyalty	
	Add-on value	- Extra offers - Complementary products		- Going beyond the baseline	
	Respect	- Good manner - VIP service		- Treating customers as important people	
Co-creation of value	Joint quality service	- Open dialog - Close collaboration		- Keeping interaction going	
	Mobilizing offerings	- Involving customers		- Make the best use of resources	
	Identified needs	- Matching customers' needs		- Listening actively to customers	
	Engaging customers	- Joint estimation of needed products - Active communication		- Informing about upcoming changes - The customer as business partner	
	Supporting system	- Using facilities for mutual assistance - Practical support		- Customer service	
	Trust	- Mutual understanding		- Mutual honesty	
	Eagerness	- Open to new ideas - Productive dialog		- Applying new ideas in action	

4-4. Summary

In this chapter the results of both the qualitative and quantitative phases of the study were used to address each objective of the study. The outcomes of the thematic analysis of the interviews have been used to illuminate the findings from the perspective of the customer in this specific industry context. The four main dimensions of the theorized model of the study were kept after the factor analysis. The factor analysis confirmed the validity of the factors. To establish which of the main four factors are more important from the customers' point of view in terms of their relationship with satisfaction, The relative priority of the value offering elements as follows: 1- price value, 2- relationship building value, 3- performance value, and 4- co-creation of value. The frequencies of value offering elements were presented that showed how the company is performing on each factor. The scale "The functionality of the product is delivered" has the highest mean among all factors and also the scales "I feel that the prices offered by the firm are valuable" and "Prices are beneficial for me" have the lowest means among all items of all elements of value offering.

In order to understand the nature of customer satisfaction, the result of thematic analysis of interviews revealed the main themes and sub-factors of the value offering elements and the result presented in table 4-13 is showing the nature of customer satisfaction in detail.

This following chapter comprises a detailed interpretation of the results and a discussion of their implications.

Chapter 5 – Discussion & Conclusion

5-1. Introduction

This chapter provides the overall interpretation of the results and conclusions of the thesis. It starts by giving a brief discussion of the proposed objectives of the thesis and with highlighting the key points and gaps in the literature that this study covered. It then summarizes the thesis findings in the context of the objectives. The research objectives are revisited with the aim of examining how successful the study has been at fulfilling them. After that, the contributions and implications of the research from theoretical and managerial point of view are discussed. Finally, the chapter explains the limitations of the thesis and also provides several pieces of advice for any future research.

5-2. Discussion

The main objectives of this study were to understand the relative importance/priority of value offering elements, the nature of customer satisfaction, and the relationship between the elements of a value offering and customer satisfaction. These three main objectives led to two research questions, i.e. what are the most and the least important elements of a value offering are, and how the elements of a value offering influence customer satisfaction? The results from the survey revealed that all four main constructs of the value offering are significantly related to customer satisfaction. That is, perceived price value and perceived relationship building value are fully significantly related to customer satisfaction and perceived co-creation of value and performance value are marginally significant with customer satisfaction.

These findings are pretty similar to those from the previous research of O'Cass & Ngo (2011). O'Cass & Ngo found that a company can attract, keep and satisfy its customers by making a proper value offering. In the current study it was found that proper value offering can make customers

satisfied. In comparison with the O'Cass & Ngo (2011) study, this research puts more focus on the separate effects of each value offering and their constituent elements. In the O'Cass & Ngo study, only the overall relationship between the value offering elements with customer satisfaction was evaluated. The current study went further and revealed the details and nature of each value offering's element as well as of customer satisfaction separately. Besides, the relative importance of the value offering elements was defined in this work. They are ordered, according to customers' point of view, as follows: 1- price value; 2- relationship building value; 3- performance value; and 4- co-creation of value.

5.2.1 Price value

So from the customers' point of view, price value is the most important element of value offering in terms of making them satisfied. This result might be related to the current political and economical situation of the country in which the study was carried out. At the time of conducting this study, Iran is under several sanctions, especially bank and product sanctions, by the USA and European countries. This external political situation could have had a direct effect on customers' opinions and have made people more sensitive to the price factor. It was surprising for me to see that the price value is the most important elements from the customers' point of view, for in most interactions with customers, they seemed to me more concerned with the quality of the products rather than with their price.

Most likely, the pressure of sanctions on the daily life of customers has increased their worries about costs and their income. Moreover, the unstable economic situation has decreased the purchase power of patients, who are the final users of the implant. When they come to dental practice for an implant treatment, they may be looking for something cheap. This may also affect dentists' decision when choosing implants. In order to keep their own customers, dentists probably prefer to have the implants that have a good price, for they can then attract more patients. In short, this external factor can be one of the reasons for the price value being the most important elements of value offering from the customers' perspective.

As price value is the most important factor for customer satisfaction, it is likely that the perception of other factors (such as perception of performance value, relationship value or co-creation value) can be affected by the price value. Price satisfaction can make customers satisfied with other factors as well, even though they are not as good as the price is. When the most important factor for the customer is met by the company, the other major constructs might be overshadowed, and any weakness in these other factors go by unnoticed by customers. This means an implant with a good price and moderate quality can be seen as a good quality implant by a dentist who is sensitive to price. This result of the study is in line with the result of Monore & Krishnan (1985) in that it confirmed that price is a stimulator for customers to buy more, and the perception of price has a positive impact on the quality perceived by the customers.

Among all scale items of price value, the highest factor loading is related to “Valuable price” construct. Valuable price mostly refers to something expensive (or more expensive than average), but which customers are willing to pay because of the benefits they are receiving. As shown by the results, the item “Valuable price” led to satisfied customers of dental implants in Iran. The other items like fair, consistent and beneficial prices have a pretty strong factor loading but as it is mentioned the highest factor loading is for valuable price item.

In the interviews, the customers mentioned that a product with a valuable price most often represents a product with a high price, and it means paying more for a higher quality. That is a very interesting result and even for dentists working in Iran who are very sensitive to price factor and in interviews they have mentioned that they are looking for a fair and beneficial price, they are ok with even expensive products when they feel and realize the value of the price. Bearing in mind that a valuable price does not necessarily belong to expensive products and this item applies to the products with average price and even the cheap ones as well.

The customers mentioned in interviews that they even buy an expensive implant if they feel that the value of the product is transferred to them. They want to see that it is worth to pay a certain price for a product. The price should be right and valuable based on the product quality. It is clear from

interviews that even if they are sensitive to the price, they will be ok with expensive products in a situation that the value of price is understandable to them.

The result of this study is line with other previous research (Dodds et al 1991). In that study, it was found that a high price could be a sign of high quality of a product and make customers perceive more quality, increasing their willingness to buy.

The importance of price value has been highlighted in some previous studies, in ways the same or different to this study. For example, the result of the study conducted by Li et al (1994) showed that price and expected price have a direct influence on perceived value, with the expected price having a positive impact on perceived value. Similarly, in the current study, one of the significant elements of price value was “a fair price in comparison to the other companies” which means that customers make a comparison between their internal reference price and the external observed price in order to access the transaction value, and that the perceived fair price has a positive effect on customer’s satisfaction.

This result regarding fair pricing is in line with another study by Oh (2003), in which price fairness had a positive effect on perceived quality and value. In addition, the findings of the current study are in line with those of the study by Homburg et al. (2005), which revealed that fair pricing gives companies the ability to gain a high degree of customer satisfaction. In another study by Zeithaml (1988) perceived value was considered in terms of a low price.

The results showed that a low price created value for customers. The current study agrees with this demonstrating that a low price of implants is perceived by the customers as a positive point that makes them satisfied. Furthermore, the results of this study are in line with those of Caruana et al. (2000), which confirmed that a low price could help to cause customer satisfaction through value. In another study conducted by Mittal & Sheth (2001), customers looked for products with offerings that included pricing value, such as fair prices, which they then compared with the offerings of competitors. In a study by Ulaga & Eggert (2006), the importance of price value is highlighted, similar to the current study.

Moreover, it was observed that a pricing value and specifically a valuable market price is a core offering value element, which from the customers' point of view is considered as a must-have value offering's element. The importance of price value found in this study is in line with the results of Chen and Myagmarsuren (2013), in which the customer aims for those products that deliver offerings with the feature of a proper price, comparing these attributes with those of the company competitors. Results highlighted the proper price feature among all features of value offering.

Through utilization of the qualitative data, a deeper understanding of the nature of price value and customer satisfaction was achieved. The customer's interpretation of the meaning of a fair price is as a reasonable price for both parties and fairer price than the others'. It means they have a good understanding of the company situation as well, and that they also consider the company profit in forming their opinions.

When customers talk about a fair, cheap price, they do not mean something harmful for the companies; they only want to have a price that seems reasonable in comparison to the alternatives and that is also average in the industry. Most dentists say that they should feel the fairness of prices, and that offering a quality implant should not allow companies to establish very high prices. That is their main idea of a fair price. Their satisfaction is really affected by this feature of price value.

Consistency in price was another significant scale of price value. It was mentioned in the interviews that companies in Iran increase the prices at the start of each year, making excuses such as inflation or the political situation of the country. This issue truly bothers most dentists, and they prefer to see consistent and fixed prices over a long period of time. The consistency has a positive relationship with customer satisfaction and can also make customers more loyal to the company. National control of external factors such as high inflation rates can help a company to keep its price fixed to make its customers satisfied.

In this case, the country is struggling with high inflation rates and the value of the national currency is also being reduced in comparison to the other international currencies such as the Euro and Dollar. Since the implants are imported into the country and companies buy them in currencies such as the

Euro and Dollar, most companies have been forced to change their prices because of changes in value of the national currency. This issue has also led to many problems for customers, and they too complain about everyday changes in the prices set by companies. In such situations, keeping the price fixed for a long time is considered a positive feature from the customers' point of view, and it can also bring competitive advantage to the company. In many cases, customers can tolerate a high constant price more than a cheap price with many changes over a short period of time. A constant price makes customers able to run their budget plan smoothly.

Another important scale of price value which has a high factor loading is "Beneficial prices". Customers want to get benefits from purchasing their implants. They are going to sell these implants to the patients in the end, and they of course like to make profit in order to maintain their own business. Even though the dentists are the main decision-makers for patients when it comes to choosing an implant, they are not the final users of the products. They like to have a profitable transaction with the patients, which can be facilitated for them by a beneficial price offered by the companies that supply them. Many customers see a beneficial price as a guarantee that they can pay their basic costs as well as gain enough revenue. These aspects make them satisfied and calm, allowing them to provide better service to their patients.

From the descriptive statistics of each element (frequencies) we can understand the performance of the company on each one of these scales. The frequencies of the price value scales show that "Giving an affordable payment method" has the highest mean from the customers' point of view. This item has the lowest factor loading among all scales explaining price value and the company performs best on a factor that does not have an impact on customer satisfaction.

This point shows the importance for a company to know its customers, their value perceptions and their preferences very well. In this case, the company has invested financially and non-financially on "Giving an affordable payment method" that is not considered by customers as such an important factor. We should also note that this item has the highest standard deviation as well as the highest number of "strongly disagrees". This shows that not all customers

feel that the company has performed successfully on this point, and that even though this item has the highest mean of all “price value” scales, there is a great deal of disagreement among customers about this factor. We can thus conclude that there is no guarantee that the company has fully satisfied most of the customers, according to this scale.

The frequency table shows that the lowest mean is for the item “I feel that the prices offered by the firm are valuable” and this frequency shows that the company has performed badly on this factor and exactly the most important element of price value is missing by the company.

The other most important factors of price value that had a relatively high factor loading are “Beneficial price” and “Fair prices”, which have a low mean from the customers’ point of view, and their frequencies show that the company has not performed well enough on these two factors either.

In a B2B context, the item beneficial price is crucial for both parties. In this context, the dentists are not the final users of the products: they are only the final customers of the company. In the end, they will sell the products purchased from the company to their patients, and expect to get benefit from their business. When a beneficial price is lacking, and the customers claim that the company is not strong in this factor, it can lead to dissatisfaction and make them unsatisfied customers.

The other weakness of the company is that the item fair prices has a very low mean too, which means that the customers do not feel that the prices of this company are fair in comparison to the other brands’ prices. That is a serious problem for the company, as the customers of dental implants in Iran are very sensitive to the price factor considering the current situation. When they feel the price of the company is not fair, this can affect their perceptions of other factors, because one of the most important element in their opinion is neglected by the company.

In other words, in this situation, any good performance of the company on the other elements and factors might still be perceived negatively by the customers, because the company has failed to meet their most important expectations.

The frequency analysis shows that the other significant scale of “price value”, which is “consistent price”, has the second highest mean from the customers’

perspective. This means the company has managed to keep their prices consistent for a long time, and that they have managed negative points such as the high inflation rate or a drop in the national currency value successfully. They have kept their prices in a stable situation, which is very positive for their customers and can be one of the key factors in keeping them customers satisfied. However, the problems is that the customers do not believe that the price of the company is beneficial or valuable, and keeping such a price fixed and consistent cannot bring any competitive advantage for the company. The company should first set their prices at a point where customers feel it is valuable, and then the company should try to keep it at that certain point. Even though the company has done a good job at keeping their prices fixed in an economic situation as the current one, it has not been welcomed by the customers that much, because the basic points of price value are neglected by the company. Moreover, analysis of the distribution of responses indicates that customers do not feel that the prices offered by the firm are valuable. Together, all these points suggest that the company has a serious problem concerning different aspects of price value, which in fact is the most important factor from the customers' perspective.

5.2.2 Co-creation of value

Surprisingly, the least important element of value offering is co-creation of value. This element has a marginally significant relationship with customer satisfaction, but relative to all other elements of value offering, has the least importance. Co-creation of value is important in business and can bring companies a unique competitive advantage. However, co-creation of value is only possible if a customer can customize their experience through a product, and this ability of co-creating value can be different in different period of times.

Companies should not forget that if and when customers are passionate or able to get involved in co-creation process, as Vargo and Lusch (2004) explained, that the role of the customer is more than simply one of a consumer; rather, customers serve as co-producers of products and services. In another study, Jaworski & Kohli (2006) showed that the value

that provides permanent competitive advantage for companies is created by both companies and customers; thus, customers play a major role in the value creation process. In a study conducted by Ngo & O'Cass (2009), also it was found that customers like to co-construct their consumption experience and that companies are eager for more interaction with their customers, which engages them in co-production activities.

Based on the results, it is clear that customers of dental implants in Iran are currently looking for a simple transaction or purchase experience rather than for any engagement in co-creation procedures. Co-creation of value is a joint process, and both companies and customers accept some risks and benefits to participate in this process. It seems that customers believe in co-creation of value benefits, as there is a significant relationship between co-creation and customer satisfaction; however, they place this factor as the least important one in their prioritization. Other factors such as price value and performance value seem more closely related to the responsibility of the companies. The customers of implants in Iran currently prefer to see more responsibilities and risks from the companies' side rather than to involve themselves in this process. Andreu, Sanchez and Mele (2010) define value co-creation as a structured course of action, in which resources are used and activities are performed by the supplier, the customer, and by both parties in interaction.

By this definition we can perhaps understand that the weaknesses of the company in planning successful co-creation has made this an important construct in customers' minds as the least important factor. The frequencies show that the item "The firm interacts with me to make offerings that match my needs" has the lowest mean as well as the highest number of the option "Strongly disagree".

This means that the company has not been successful at interacting with its customers, and that the customers do not feel that the company's main intention for interacting with them is to help them and try to meet their expectations or needs. this item has the highest factor loading and the analysis showed this scale is very important in terms of co-creation of value. The low mean of this item could be due to a lack of trust between the company and its customers, as the statistics show that the item "The firm is

trustful and I can rely on this firm” has one of the lowest means of all scales, which indicates that the company is not considered to be reliable by customers.

Another possibility is that the co-creation is a new concept which in many cases is understood as anything that firms and customers do together. However, co-creation goes beyond this point, and not having a full understanding of this concept can make the customers uninterested in getting involved in the process. In co-creation of value, the role of the company is very important, and companies must make proper and sufficient infrastructures and create an initial willingness among customers to become part of this process. It could be that the lack of a good platform and the weakness of the company are the reasons that have kept customers away of engaging in the value co-creation process.

One of the most interesting results concerns the item “The Company engages me in the process of providing services” which does not show a high factor loading in confirmatory factor analysis. Perhaps the customers consider engaging in the process of providing service as a hassle for themselves that can make their purchase experience more difficult. This would mean that customers like to get involved in the process of co-creation as long as they do not have to take too much responsibility or risk in this process. In short, it can be concluded that the customers in this sector are conservative in their willingness to become engaged in the process of co-creation of value.

In interviews it was mentioned that if companies use the interaction in order to find out their customers’ needs, they will be able to provide them with the products and services that match their needs. Thus, to engage in any co-creation, customers first need to see that the company can be trusted. If they find the company reliable, they will be satisfied and they will like to interact with the company. They want to feel a mutual honesty and understanding between themselves and the company. If there is a lack of trust between two parties, it is very difficult to see any cooperation between them, for trust seems necessary for having interaction between customers and companies. As Morgan and Hunt (1994) stated, making value is not the only important

matter in the relationship between companies and customers, but factors such as trust are significant points.

As previously noted, the company has not performed well enough to create trust, and the result of the survey indicates that trust is lacking between the company and customers. This issue had led to customers considering co-creation of value the least important element of the company's value offering. They do not show any interest in being engaged in the process of co-creation. Trust is the foundation of any type of co-creation of value, and co-creation of value does not occur between the company and its customers unless there is mutual trust.

The firm interacts with me to give a better service and the firm interacts with me to make offerings that are match with my needs have the highest factor loadings. This result confirms that having a proper interaction with customers is necessary for a co-creation and also customers should feel that the reason of this interaction is to get a better service and the company tries to make an interaction in order to prepare the offerings that are match with their needs. The item "The firm interacts with me to make offerings that are match with my needs" has the lowest mean of all co-creation of value scales, which shows that the company has performed badly on this factor and one of the most important factors that represent co-creation of value is missing by the company. As mentioned in interviews in a specialized field like dental implant it is necessary for the companies to have a close interaction with their customers in order to realize their exact needs and the more they interact with customers the better they can give service to their customers.

In addition to these most and least important elements of value offering, the relationships between the other elements of value offering and customer satisfaction were evaluated. Performance value marginally and relationship building value fully were found to be significantly related to customer satisfaction.

5.2.3 Relationship building value

In terms of relationship building value, out of all scales related to this factor, two has the highest factor loadings. The items “The firm is looking for having a long-term relationship with me” and “The company regularly offers me some extra services and add-on values” has the highest factor loadings. Long-term relationship refers mainly to knowing customers for a long time, staying in touch with them, and keeping them in the company’s radar for a long time. The result shows that being in a long-term relationship with the company is necessary to lead to satisfied customers. On the other hand, customers are looking for a long-term relationship with the company which involves more frequent communication and interaction between them and the company. In interviews it is mentioned that companies should be sensitive to long-term relationships with their customers. One way in which a company can show their positive attitude towards long-term relationships is by rewarding those customers that have been loyal to the company for many years.

The result is in line with a study conducted by Lambert & Dastugue (2006), which argued that if a company wants to have and maintain a competitive advantage, it is necessary for the company to keep a long-term relationship with its customers.

The frequencies show that the items “The firm is keeping a continuous relationship with me” and “The company regularly offers me some extra services and add-on values” have very low mean. This means that the company has performed poorly in maintaining a long-term relationship with its customers and also was not able to offer add-on values and services to the customers.

The company is lacking two main factors of customer satisfaction. When customers feel that their relationship with the company does not last too long, and they have been targeted for only a short period of time with the company merely maintaining a relationship with them for the moments at which they are buying from the company, this make the company unreliable in the customers’ eyes. This item can be one of the explanations for the issue mentioned earlier, i.e. that customers have lost their trust in the company and

do not like to be engaged in any co-creation of value. Customers might wonder how they can trust a company that is not interested in maintaining a long-term relationship with them. This issue can cost the company a lot of money, and can lead to a great deal of dissatisfaction among customers. As previously mentioned the factor “add-on value” has a high factor loading. This factor refers to complementary products or extra offers given to the customers. In fact, the “Relationship building value” element was the second most important element of value offering from the customer’s point of view; after price value, customers consider this element the most important one. The company should transfer this message to their customers that the services offered by them is something extra and value added and the company likes to make a better relationship with customers by offering such this service. In interviews it is mentioned that companies should identify the baseline value of their products and try to add something beyond that in order to make their add-on value services visible for customers.

As mentioned earlier, price value is the first priority of customers in Iran, most likely as a result of the current economic and political situation of the country. When the economic and political situation of the country is more stable, the most important element of value offering might be “relationship building value”. Customers favor this intangible element over the other tangible elements such as product quality, innovation and functionality of products. The importance of physical elements such as product features are replaced by the relational based elements such as relationship building value. As the results show, customers often bought a product with lower quality from a company just because of the relationship that the company had built with the customers. As Wikstrom (1996) found, the relationship between customers and producers has become closer, and there is a type of joint business between the customer and the company. The role of the consumer is that of co-producer of value, and the customer is not a passive receiver anymore.

5.2.4 Performance value

In terms of performance value, of all scales related to this factor, the highest factor loading is for the items “The firm provides products that are exactly what I want” and “The company provides me products that exceed my expectation”. “Exceeding customers’ expectations” means that the company provides products or services that exceed their customers’ expectations. This scale was significantly related to customer satisfaction. The other scale, “Customers’ needs”, refers to providing the products that are exactly the ones that the customers want.

This is an interesting result, it means that the least important customers’ expectation from the company is to be provided with the products that are exactly what they want and performance value of a company should meet their expectations.

In interviews it was mentioned that it is important for a company to succeed at understanding what exactly customers need and since this field of work is specialized, it is likely to see some misunderstandings between customers’ need and the companies offers. In other words, in such a specialized field as dental implants, it might be difficult to provide the customer with their needs. Companies should take the trouble to listen to the voice of their customers in order to find out what their specific needs are.

The basic needs of implant customers in Iran concern a modern design of implant, a variety of sizes, and a product made in a reputable country. In today’s market, all these needs are provided to the customers by most companies, and these features thus seem basic from the customers’ perspective. In fact, if a company wants to have a complete satisfied customer today, and bring him/her a great experience, it has to provide products and services that exceed their customer’s expectations. One of the main crucial points in exceeding customer is to consider customer feedback. Customers’ feedback should be integrated into the core strategies of the company, and should also be seriously considered in the company’s main activities. Feedback gained from customers should be placed at the heart of companies’ strategies.

In a study conducted by Oliver (2006), the results pointed to the same conclusion. This study found that if a company performs below its customers' expectations, this leads to dissatisfaction, and if a company performs above customers' expectations, it creates satisfaction. The same result was presented by Parasuraman et al. (1998), as they argued that customer satisfaction was gained from a comparison made by customers between perceived performance value and other standards such as expectations. When customers feel that product performance equals their expectation, they are satisfied (confirming); when product performance is above their expectations, customers are very satisfied (positively disconfirming); however, when it is below their expectations, customers experience dissatisfaction (negatively disconfirming). The first and main necessary step for exceeding customers' expectations is to know those expectations. The problem that many companies have is that they think that they already know what the main expectations of their customers are, before actually listening to the voices of their customers or considering their feedback. This situation is very dangerous for companies and it is a kind of trap that can put them in a very bad situation. Companies thus need to hear the voice of their customers and pay attention to the points of feedback. In fact, feedback reveals the expectations of customers and the weaknesses of the company. Through this feedback, companies can get closer to their customers and understand what is important for their customers. Based on that, they can build the main strategies of the company. Feedback is one of the best measures of customer satisfaction. It shows whether or not a company is successful at meeting its customers' expectations, and also can make companies more confident when making their main decisions. Feedback from customers helps companies to solve issues and deliver better service and products to customers, in order to exceed those customers' expectations. Besides, customers like to see that companies are willing to listen to their feedback, and when companies value their feedback, customers will feel fully satisfied. Companies should consider customers as part of their solution rather than as part of their problem, and they should work with customers to solve this problem. Paying attention to the emotional side of customers can make a

significant difference in terms of reaching customers' heart. If companies make this effort, customers see that companies do not see them as a business target; but rather that, companies are seeking to exceed their expectations by putting a great deal of effort into taking care of them even emotionally. Sometimes paying attention to small details of customers, especially in terms of an emotional dimension, can bring a considerable, positive result to the companies and can make them successful.

The study by De Ruyter et al. (1997) focused on how satisfaction is influenced by the different stages in the service delivery process. It confirmed that the emotional value dimension has the biggest impact on customer satisfaction, in comparison with the logical and practical dimensions.

The results in this study show that the items "The firm provides products that are exactly what I want" and "The company provides me products that exceed my expectation" have the lowest mean of all relationship building value scales. This suggests that the company has not been able to provide the products that customers want exactly, and that it is unable to exceed its customers' expectations. As previously noted, to do so, the company needs to hear the voice of its customers and use their feedback in defining their main strategies. Based on this result, we can conclude that the company fails to do so. Therefore, two of the most important factors of relationship building value are neglected by the company.

The highest score mean is for the item "The functionality of the product is delivered" which does not show a high factor loading. Here again we see a mistake from the company to focus on a factor which is not considered as an important item from the customer's point of view. Delivering functionality of products can be a very good feature for the company, but in the context of dental implants it is understood that this feature is something basic for the products. It is believed that it cannot bring any competitive advantage for the company, because from a customer's point of view, this is something elementary and necessary for any dental implant. This means that the good performance of the company in this area does not bring the customer happiness, and that customers are looking for something beyond this factor to get their expectations met.

In terms of the relative importance of the value offering elements, the “performance value” element is the second least important element from the customers’ perspective. It is ranked after the elements “price value” and “relationship building value”. This is a surprising result, because the element of performance value contains items such as “High quality”, “Innovative features”, and “Functionality”, containing factors such as ease of working, clinical papers, advanced and faster implants, and many other points that at first look seem the most important ones. In a study by Tournois (2004), the process of value creation was defined as the effort and ability of a company to offer a higher perceived value to customers in comparison to its competitors, in terms of the quality of their offerings’ products.

However, a major part of the current study’s results showed that these physical factors are not as important as they used to be. Instead, customers are looking for intangible items such as having better relationship with companies and seeing mutual respect and proper behavior. All of these factors are intangible, and these intangible factors are key for customers in choosing their providers. The same result was found in a study by Ngo & O’Cass (2009), namely that intangible factors can bring value to customers and make them satisfied.

Today, the process of creating value does not happen in isolation. It has become a two-way process between companies and customers, and each of them has their own role in making value, leading to a great purchasing experience. An innovative quality product that is made by the company only, without considering the customers’ engagement or involving their feedback and voice, does not make customers satisfied. Customers like to see their voice and opinion visible in the products and services offered by the companies.

5-3. Conclusion

Perceived price value and perceived relationship building value are fully significantly related to customer satisfaction and perceived co-creation of value and performance value are marginally significant with customer satisfaction. In addition, the relative importance of the value offering elements were defined, and these are ordered from the customers' point of view as follows: 1- price value; 2- relationship building value; 3- performance value; 4- co-creation of value. Thus, from the customers' point of view, price value is the most important element of value offering. In specific, customers are looking for a valuable consistent price offered by the companies. They want to have a price that seems reasonable in comparison to those of the others. They prefer to see consistent and fixed prices over a long period of time. Customers want to get benefits from purchasing their implants. The least important element of value offering is co-creation of value. Customers of dental implants in Iran currently want a simple transaction rather than any engagement in a co-creation procedure. They like to be involved in the process of co-creation of value as long as they do not take too much responsibility or risk in this process. Trust between companies and customers, and eagerness of companies to hear the ideas of customers, are necessary for establishing any co-creation of value. The customers are satisfied when they see the company interacts with them to give a better service or make offerings that are match with their needs. The relationship building value element was the second most important element of value offering. Customers seek a long-term relationship with the company, in which communication and interaction occurs frequently. If the company regularly offers customers some extra services and add-on values, it makes the customers satisfied. The performance value element is the second least important element from the customers' perspective. This is a surprising result, because the element of performance value contains the items "High quality", "Innovative features", "Functionality", which seem important at first glance. If a company wants to have a fully satisfied customer today, it has to provide products and services that exceed its customers' expectations. To do so, they need to consider

customers' feedback. This should be considered seriously in setting up the main strategies of the company.

The companies need to listen to the voice of their customers, and they should consider the customers as part of the solution rather than as part of the problem. In fact, they should work with their customers to solve the problem. Paying attention to the emotional side of their customers also can make a considerable difference to the companies.

The results show that the company has managed to keep its prices consistent over a long period of time, but that it is performing poorly in terms of offering a valuable price to its customers. This is leading to a point where customers do not believe the prices are valuable at all. In addition, the company has not been successful at interacting with its customers. This could be the result of a lack of trust between the company and its customers, as the statistics show that the company is not considered a trustworthy one by its customers.

The company has shown its passion and openness to new ideas of the customers, but this kind of eagerness can be helpful only when it is complemented by mutual trust. In addition, the company has been unsuccessful at establishing an effective, long-term relationship with its customers, which can be one of the main reasons of losing trust among its customers.

The company has not been able to provide the products that customers want exactly and has also not been able to exceed its customers' expectations. Both of these points are crucial when it comes to customer satisfaction.

5-4. Theoretical contribution

There is a significant lack in the literature in terms of value offerings. A consideration of the literature shows that there are many studies about value, perceived value, and satisfaction, but very few studies about value offerings specifically. It is very difficult to find research that has addressed different types of value offerings of companies, especially from the customers' point of view. This study therefore contributes to theory by providing a more comprehensive theoretical framework of value offerings. This study also

helps any future measurement of customer satisfaction. The results of this study provided empirical support for the proposed framework, and suggested that value offering elements have a significant relationship with customer satisfaction. In addition, it has revealed insights into the nature of customer satisfaction and details of the elements of value offerings.

The literature review in chapter 2 presented a comprehensive review of the history of literature on value, perceived value, and value offerings in both B2B and B2C contexts. By organizing the major research streams around value and perceived value, it provides a comprehensive framework for future studies on perceived value and value offerings. The key concepts of value offering, and of customer satisfaction (in the context of the dentistry market in a developing country) were further defined in this study.

Most of the previous studies in the value offerings context have looked at this concept from a manager's point of view, meaning their result have been based on a manager's perspective and perceptions. However, the current study has analyzed value offering from a customer's point of view, which has brought more and different insights that are relevant to the value offerings literature.

Furthermore, this study is the first in the value offering literature that has defined the relative importance of the value offering's elements. Earlier studies looked only at the relationship between the value offering's elements and other constructs, such as customer satisfaction or customer retention, without evaluating the relative importance of the value offering's elements. All of these findings make significant contributions to management knowledge in the domain of understanding value and satisfaction.

5-5. Managerial contribution

From a managerial perspective, this study has important implications for managers in relation to the value offering processes. The findings confirm the positive effects of value offerings' elements on customer satisfaction, thus offering managers a practical application. That is, to make their customers satisfied, companies should invest in developing their value offering strategies in four key areas: performance value, pricing value, relationship

building, and co-creation value. The profile of value offering including the above elements enables managers to understand what makes value and how to assess value in the context of the value offering perspective.

The results of this study bring many insights relevant to business companies active in Iran, especially those in the dentistry industry. The results revealed the main preferences of customers and the elements that affect the customers' perceived value, showing how to make customers satisfied and persuade them to stay loyal to companies.

The results of this study are very useful for entrepreneurs who would like to be active in the dentistry field, or for companies that are newly established and beginners in the Iranian dental market. They might have little understanding of the desires and preferences of dental customers in Iran and wish to better understand the customers' needs and preferences. Using the findings of this study can help them survive in a very competitive dental market of Iran, and may allow them to take a positional advantage over their numerous competitors.

The findings give managers of companies active in the dentistry field an insight into which factors make the customers satisfied. Being available anytime for customers is vital. That is a big lesson from this study for managers dealing with customers. By looking at the findings of this study, managers can understand how exactly they can bring value to customers in the Iranian dental market.

5-5-1. Practical Implications for MTA

The driver for undertaking the DBA initially, and for this focus on the research project was the value-related business challenges for MTA, which had been struggling with its market share and with a loss of competitive advantage in the Iranian market for many years. Through this study, a comprehensive evaluation on the company value offerings system was performed from the customers' perspective.

Moreover, a comprehensive understanding of the customers was gained through in-depth interviews. The main factors affecting customers' satisfaction were also defined with the survey. MTA understood that, even

though it has been in the market for over 10 years, there were still a lot of things to learn about their customers, and there are many shortcomings in its knowledge of its customers.

The results of this study showed the importance of pricing, suggesting that MTA should establish a valuable price for their customers, and make a price database to also identify the competitors' prices, and try to 'beat' their prices in order to keep customers satisfied. The company needs to set new prices for its products, because in the current situation, customers do not feel that the prices offered by the company are valuable. They even say that the prices are not fair in comparison to those of the other providers. Building a better relationship with the manufacturer in Spain, a better budget and purchase plan, and a comprehensive and continued analysis of the market trends, could enable the company to better anticipate changes in the future, and make a better decision on the pricing strategies.

The results showed that among all price value's scales, the company has focused most on giving more payment options to customers, as this item had the most "Strongly agree" answers and also the highest mean among all other scales of price value. Later in the analysis, it was found that this item did not have a high factor loading and that customers are looking for items such as valuable pricing. This means that the company should now start concentrating more on the items that have a significant relationship with customer satisfaction, and these items are set by the customers themselves, and not by the managers of the companies.

The other result showed that the customers are not keen on any co-creation of value with the company. Other studies, such as Lusch & Vargo (2004, 2014), Oliver (2006) and Jaworski & Kohli (2006) emphasized the importance of co-creation of value in today's business. They have argued that in today's business, the process of making value does not happen in isolation, and that it has become a two-way process between companies and customers. As the customers in Iran ranked this item as the least important, it is perhaps attributable to the company's weakness in planning a successful co-creation. This may have made this important construct the least important factor in customers' minds. The statistics showed that a majority of customers disagree with the sentence "The Company is trustful", and the basic principle

of any co-creation of value is trust between two parties. This means that the company has to try to bring the trust back to its customers. This lack of trust can be based on a shortage of quality in the products or service, the delay in providing products, the constant changing in the prices or the breaking of promises to customers. The company needs to be more focused on unsatisfied customers and find out why they have lost their trust in the company, and then, by considering the above-mentioned mentioned points, try to rebuild this missing trust. This way, they might persuade those customers to be more engaged in the value co-creation process.

The relationship building value was the second most important element, and the results shows the item “The firm is looking for having a long-term relationship with me” has very low mean. A long-term relationship was one the significant scales and this showed that the company is missing one of the main factors of relationship building value, which is very important from the customers’ perspective. Many customers are feeling a lack of a long-term relationship between themselves and the company. The company has to know that just having a customer in their list for a long time is not enough, and that the frequency of interaction with their customers and the quality of the relationship is very important too. The company should try to make itself more visible to its customers and turn its passive relationship into an active one.

The company is performing well in terms of availability and respecting its customers. The customers are satisfied with these two features. However, the company is performing poorly at the factor of a long-term relationship with its customers. Moreover, this negative point can damage the other positive ones, because the customers might think that they get respect from the company as long as they buy something from it, for they feel that the company is not looking for a long-term relationship. If the company succeeds at showing to its customers that it is keen on maintaining a long-term relationship with them, customers can see more benefits and outcomes of their already positive performances.

Results furthermore revealed that “The firm provides products that are exactly what I want” received the highest number of “Strongly disagree”, showing that the product of the company is not matching customer’s

preferences. It was found that customers are satisfied when the company exceeds their expectations, but here it is shown that the company even has a problem with providing the items that are asked for by its customers. This problem can be based on not hearing the voice of the customers or not considering the feedback of customers in defining strategies.

The company needs to find ways to listen more to its customers and be passionate about customers' feedback, and try to apply this valuable feedback to its main strategies. The first and basic step towards exceeding customers' expectations is to know those expectations. The problem of the company is that they believe that they already know the main expectations of the customers, before listening to the voices of their customers or considering their feedback. This issue has led to a disconnection between the company and its customers. In sum, the results of this study have the potential to help MTA survive in this competitive market and pass this decline stage of its life cycle to come back as the top player in this tough competitive market.

5-6. Limitation of the research and further research

Similar to the other studies, this research has its own limitations. One of these limitations is that this is a single case study about MTA. For the future, it is recommended to consider two or three more companies, and have a longitudinal multi-case study to also compare the company's performances and their customers together. This will provide insights into the other companies' value offerings and customers. This is likely to show some results different to this study.

In addition, value is contextual and situational, and it would be interesting to analyse the value offerings in other industries for comparison and validation. This study focused on the dentistry industry, and if future research looks at other industries, it is possible that it will uncover further components of value offerings' and different relationships between customer satisfaction and the value offerings elements. Generalizing to all sectors is not possible based only on the current study.

Another point for future research would be to analyze the constructs in another country with a culture and economic situation different from Iran. This could tell us more about the value offering elements and their relationship with customer satisfaction in other regions.

Besides, in this study, value offering elements' relationships were compared with the customer satisfaction construct. However, there are other constructs that could be added to the conceptual model of this study, such as customer acquisition or customer retention. Exploring the relationship between value offering and these two other constructs could produce results that are useful to companies, because attracting new customers (customer acquisition) and keeping them loyal (customer retention) are important points for the companies which could affect their strategic value offering processes.

Besides, this study focused on value offerings from a customers' perspective, and future research could focus more on firms' perspective and consider the managers' perspective on their strategies for value offerings. This issue could be explored inside the companies rather than through engaging customers in an evaluation process.

Perhaps it also is a good idea to try to understand value offering from both a managerial and a customers' perspective, i.e. explore both in a single study. The results could be integrated to develop a comprehensive framework for value offering based on both internal and external environments.

Another topic that is interesting and related to value offering is brand equity. As mentioned in the literature review, brand equity is the value of brands to customers. The relationship between this construct and the value offering elements can be a very interesting topic for the future studies. Brand equity is related to the value in use perspective, and the relationship of this construct with the value offering of companies is a potential area for future research.

In addition, considering external factors such as the political or cultural situation of the country of a study seems necessary, because these factors can lead to different results or show a direct impact on the main constructs of the study. Considering these external factors in future research could shed more light on the relationship between the main constructs of the theorized model and political or cultural factors.

Another idea for future research is to consider factors such as gender or the age of participants, and evaluate the effects of these factors on customer satisfaction or perceived value, as well as their effect on the relationship between customer satisfaction and value offering. Results might differ between men and women in terms of their perceived value or preferences. In addition, each of the value offering elements (Performance value, price value, relationship building value, and co-creation of value) in itself is a potential topic for any future research. Each of them is broad enough and capable to be the main focus of any study, and their relationship with other marketing topics can be evaluated in more detail in separate studies. Each of these elements, including the sub-factors that were found in this study, can be used for research in the future. Especially the co-creation of value concept has received much attention and interest in the marketing literature lately, and this element's relationship with customer satisfaction, retention and acquisition can be explored in different contexts and industries. Even when the above limitations are taken into consideration, this study has extended our knowledge of the current perspective of value offerings from the companies as well as the concept of customer value.

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Appendix – Questionnaire



Do we create value for you?

Delivering the products you need is important to us.
Please help us to provide the things you need by
completing this short survey.

Survey Information

This survey is about understanding the value we create for you and your satisfaction with this.

This survey is a part of my Doctorate course in Bradford University, UK. I have approached you because you are a valuable customer who can guide us to deliver the best services and products.

Please be assured that your name will remain confidential, the data will be anonymous and will be kept securely.

Should you have any further queries about the study Please feel free to contact myself or my supervisor, Prof Gillian Wright, who can be reached at G.Wright@mmu.ac.uk.

Amirreza Mehraramolan
amehrara@student.bradford.ac.uk
Phone: 0912 1951473

What are your views on products and services offered to you by the firm (~~Mehr Teb Asia~~)?
Please indicate the extent to which you agree with each statement

Performance Value

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The firms' products are in accordance with my personal preferences.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The quality of the product provided by this company is higher than the other firms'.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The firm provides products that are exactly what I want.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The company provides me products that exceed my expectation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The firm provides products with innovative features.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The functionality of the product is delivered.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Price Value

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Prices are fair in comparison with the other brand's prices.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prices offered by this company are consistent.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prices are beneficial for me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel that the prices offered by the firm are valuable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The firm is giving me an affordable payment method.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Relationship Building Value

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The firm is accessible for me at any time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All the time the company responds my enquiries in the quickest possible time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The firm is keeping a continuous relationship with me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The firm is looking for having a long-term relationship with me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The company regularly offers me some extra services and add-on values	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>I am being treated by the firm as an important person.</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Co-creation of Value

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The firm interacts with me to give a better service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The firm is working with me to produce offerings that mobilize me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The firm interacts with me to make offerings that are match with my needs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The company engages me in process of providing services.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The firm provides me with supporting systems to help me get more value.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The firm is trustful and I can rely on this firm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The firm is passionate and open to my new ideas.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Customer satisfaction

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am satisfied about the quality of products offered by the firm.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am satisfied about the cost that I pay for having the products.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am satisfied about the convenience to buy provided by the firm.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am satisfied about the way that I am communicated by the firm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Customer retention

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am likely to recommend this company to a friend or colleague.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am likely to continue to purchase from this company.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel that I have got a commitment to this company.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How long are you buying the products from this company?

Less than 1 year ☐ Between 1 to 2 ☐ Between 2 to 3 ☐ Between 3 to 4 ☐ More than 4 years ☐

How many dental implants do you buy from this company annually?

Less than 20 ☐ 20-40 ☐ 40-60 ☐ 60-80 ☐ More than 80 ☐

Thank you

That's it. We appreciate your time
completing this survey.
Thanks again for your co-operation.

Please return the questionnaire to the following
address:
#22, Shahrara Building, 30th alley, Arash Mehr St.,
Shahrara, Tehran.
Or please call us on 021-88288112 and our courier is
coming to collect it.